

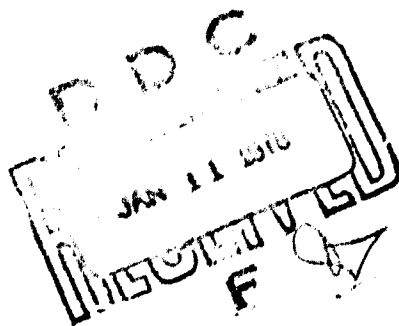
12

AD

TECHNICAL REPORT
NATICK/TR-77/029

ANTHROPOMETRY OF WOMEN OF THE U.S. ARMY - 1977

Report No. 5 - ~~Comparable~~ Data for U.S. Army Men



July 1977

Approved for public release;
distribution unlimited.

UNITED STATES ARMY
NATICK RESEARCH and DEVELOPMENT COMMAND
NATICK, MASSACHUSETTS 01760



Clothing, Equipment & Materials Engineering Laboratory

CE&MEL-176

AD A048591

FILE COPY

Approved for public release; distribution unlimited.

Citation of trade names in this report does not constitute an official indorsement or approval of the use of such items.

Destroy this report when no longer needed. Do not return it to the originator.

UNCLASSIFIED

CE/MEL, NATICK

(19) 176, TR-77/029

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER NATICK/TR-77/029	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) ANTHROPOMETRY OF WOMEN OF THE U.S. ARMY--1977. REPORT NO. 5 • COMPARATIVE DATA FOR U.S. ARMY MEN Number		5. TYPE OF REPORT & PERIOD COVERED 9 Technical Report.
6. AUTHOR(s) 10 John T. McConville, Edmund Churchill, Thomas Churchill Robert M. Whitey U.S. Army Natick Research and Development Command		7. PERFORMING ORG. REPORT NUMBER CEMEL-176
8. PERFORMING ORGANIZATION NAME AND ADDRESS Webb Associates, Inc. P. O. Box 308 Yellow Springs, Ohio 45387		9. CONTRACT OR GRANT NUMBER(s) 15 DAAG17-76-C-0010
11. CONTROLLING OFFICE NAME AND ADDRESS U.S. Army Natick Research and Development Command Attn: DRXNM-VCA Natick, Massachusetts 01760		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 16 62723A 17 1L762723AH98/AC-003
12. REPORT DATE 11 Jul 77		13. REPORT NUMBER 12 238p.
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		14. NUMBER OF PAGES 237
15. SECURITY CLASS. (of this report) Unclassified		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Anthropometry Survey(s) Human factors engineering Measurement(s) U.S. Army Static strength Body size Military personnel Data Sizes (Dimensions) Men		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report, the fifth in a series which deals with the results of an anthropometric survey of 1331 U.S. Army women, presents comparable data resulting from the measurement of 287 Army men. The opportunity to secure measurements on male subjects made by the same technicians at the same time and place, and using precisely the same measuring techniques, provided a unique source of comparative data for the design of Army clothing, equipment, and workspaces which, increasingly, must accommodate the wide range of sizes represented by both sexes. center p142313		

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 68 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

401 286

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

20. ABSTRACT (continued)

The subjects in the

The men's survey was carried out at Fort Jackson, South Carolina, in early 1977. The subjects represented a homogeneous group, chiefly trainees with a median age of about 19 years. The sample was composed of approximately two-thirds Whites, one-third Blacks, and a small fraction of Orientals.

This report describes the conduct of the survey on men and includes the univariate summary statistics and frequency tables resulting from it. Data obtained in the survey included 44 of the 69 body size measurements made on Army women and 13 of an additional 24 standard body dimensions measured on the women, as well as three identical subseries of workspace, head and face, and static strength measurements. Also provided are 51 selected bivariate frequency tables.

Δ

1473B

ACCESSION for	
NTIS	White Section <input checked="" type="checkbox"/>
DDC	Black Section <input type="checkbox"/>
UNCLASSIFIED	<input type="checkbox"/>
DISPATCHED	
DISTRICT COPIES	
SPECIAL	
A	

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

PREFACE

The research reported here was carried out by the Anthropology Research Project of Webb Associates in Yellow Springs, Ohio, under contract DAAG17-76-C-0010 with the U. S. Army Research and Development Command in Natick, Massachusetts. Mr. Edmund Churchill served as senior investigator and Mr. Robert M. White as project officer.

Arrangements for the survey's operations and the scheduling of subjects--both female and male--at Fort Jackson were handled efficiently and cooperatively by Lieutenant Colonel Robert D. Martin and Mr. Gordon Wingard of the Supply Division; it is the authors' pleasure to acknowledge once again the importance of their help. The actual measuring at Fort Jackson was conducted in physical facilities normally assigned to SP/4 Frances Moyer; the cheerful welcome, cooperation, and assistance provided the survey team by Fran and Sheba Moyer constitute for all involved rich and pleasant memories.

The data editing and analysis was the responsibility of Thomas Churchill. Preparation of the report for publication was undertaken by Ms. Jane Reese with the assistance of Ms. Diann O'Daniel. Ms. Ilse Tebbetts did the final editing.

NOT
Preceding Page BLANK - FILMED

TABLE OF CONTENTS

	<u>Page</u>
LIST OF FIGURES	5
LIST OF TABLES	5
INTRODUCTION.	7
CHAPTER I. THE CONDUCT OF THE SURVEY AND ITS SAMPLE	9
CHAPTER II. THE CORE--SUBSERIES 1 MEASUREMENTS.	19
CHAPTER III. SUBSERIES 2: WORKSPACE MEASUREMENTS.	33
CHAPTER IV. SUBSERIES 3: HEAD AND FACE MEASUREMENTS.	39
CHAPTER V. SUBSERIES 4: STATIC STRENGTH MEASUREMENTS.	51
BIBLIOGRAPHY.	67
APPENDIX A. Additional Summary Statistics.	69
1. Core-subseries 1 measurements.	70
2. Workspace subseries.	72
3. Head and face subseries.	73
APPENDIX B. Frequency Tables	75
1. Core-subseries 1 measurements.	76
2. Workspace subseries.	105
3. Head and face subseries.	113
4. Static strength subseries.	132
APPENDIX C. XVAL Computer Printouts.	151
1. Core-subseries 1 measurements.	153
2. Workspace subseries.	163
3. Head and face subseries.	166
4. Static strength subseries.	172
APPENDIX D. Bivariate Frequency Tables	179
INDEX BY NAME, ANATOMICAL LOCATION, AND MEASUREMENT TECHNIQUE. .	231

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	The survey blank: core and subseries 1 measurements . .	20
2	The survey blank: workspace subseries	34
3	The survey blank: head and face subseries	40
4	Headboard	41
5	Strength-measuring handles.	52
6a,b	The survey blank: static muscle strength subseries. . .	53,54

LIST OF TABLES

<u>Table</u>		
1	Distribution of Sample by Subsample Membership.	10
2	List of Measurement Names and Sequence Numbers.	12
3a,b	Distributions by Socio-Military Background Variables. .	17,18
4	Basic Summary Statistics: Core-Subseries 1 Measurements.	27
5	Basic Summary Statistics: Workspace Measurements. . . .	37
6	Basic Summary Statistics: Head and Face Measurements. .	46
7a-i	Static Strength Measurements.	57-65

ANTHROPOMETRY OF WOMEN IN THE U. S. ARMY--1977
REPORT NO. 5 - COMPARATIVE DATA FOR U. S. ARMY MEN

INTRODUCTION

The increasing presence of women in the ranks of the U. S. Army and, in particular, their presence in job assignments not previously open to them has created a substantial need for body size and related data for Army women. In some areas, such data will be used to create clothing, masks, and other items of personal equipment designed specifically for women. In other areas, however, design efforts will be directed toward items for use by both women and men and toward integrated systems of sizes. It is important, not only in the support of such design efforts but for the exploration of the feasibility of such efforts as well, that there exist data for men and women based on precisely the same measurement techniques. It is doubtful that there exists any method for doing this other than that of having the same measurers make the measurements on both the women and the men.

Thus when the opportunity arose, while conducting the survey of U. S. Army women, to measure a sample of young Army men using the same measuring team and the same techniques, it represented a chance to obtain comparative data unique in the history of U. S. military body size studies. This report describes the conduct of the men's sub-survey and includes the univariate summary statistics for the data obtained in it. A measurement-by-measurement comparison of the data for the men with that for the women will be provided in a later report.

Chapter I describes the conduct of the survey and provides a modest amount of background information about the sample. The next chapter defines the measurements included in the "core" series combined with subseries 1 and lists the mean, the standard deviation, the coefficient of variation, and 13 percentile values for each variable, both in metric and English units. Chapters III-V provide similar information for the measurements in the several subseries. Secondary sets of statistical information are given in the three appendices of the report. Measures of symmetry and kurtosis and standard errors of the means and standard deviations and six additional percentiles are given in Appendix A. Appendix B contains the frequency distributions, and Appendix C lists the "XVAL" computer printouts. Selected bivariate frequency tables can be found in Appendix D.

The final item in this report is the Index by Name, Anatomical Location, and Measurement Technique, which, it is hoped, will facilitate the identification and location of the measurements.

The general survey methodology and the measurement techniques were described in the first report of this series (Laubach, L. L., J. T. McConville, E. Churchill and R. M. White, Anthropometry of Women of the U. S. Army--1977, Report No. 1, Methodology and Survey Plan, Technical Report NATICK/TR-77/021, U. S. Army Natick Research and Development Command, Natick, Massachusetts, 1977); the basic statistical summaries have been given in the second report of the series (Churchill, E., T. Churchill, J. T. McConville and R. M. White, Anthropometry of Women of the U. S. Army--1977, Report No. 2, The Basic Univariate Statistics, Technical Report NATICK/TR-77/024, U. S. Army Natick Research and Development Command, Natick, Massachusetts, 1977). Over 300 bivariate frequency tables based on the women's data are presented in the third report (Churchill, T., E. Churchill, J. T. McConville and R. M. White, Anthropometry of Women of the U. S. Army--1977, Report No. 3, Bivariate Frequency Tables, Technical Report NATICK/TR-77-028, U. S. Army Natick Research and Development Command, Natick, Massachusetts, 1977).

Chapter I

THE CONDUCT OF THE SURVEY AND ITS SAMPLE

The measurement of 287 male soldiers was carried out at Fort Jackson, South Carolina, during the brief period from February 3 to February 11, 1977, following the completion of a survey of Army women. The subjects were, with one exception, men undergoing basic training who, as a rule, had been in the Army less than two weeks.

The general methodology of the survey and its staff was essentially the same as that of the anthropometric survey of U. S. Army women, a survey which had been conducted during the periods November 2 to December 3, 1976, and January 10 to February 3, 1977, at Fort Sam Houston, Fort McClellan, Walter Reed Medical Center, and Fort Jackson.

The Measurements

A significant aspect of the women's survey was the division of the measurements into a core series and four subseries: (a) additional traditional anthropometry; (b) workspace measurements; (c) head and face measurements; and (d) static strength measurements. All of the women were measured in the core series and roughly one-quarter of the women were measured with each subseries of measurements. For the men, this arrangement was changed by eliminating some measurements from the core series and the first subseries and combining the remaining elements of these two series into a set of measurements which was made on all subjects. Two measurements, midshoulder height and waist height, omphalion, which had been measured on only a few of the women, were added to this series. The measurements in the other series (workspace, head and face, and static strength) were the same for both the women and the men except for the addition of three measurements (ear length, ear breadth and biauricular breadth) to the head and face series.

The plan of making one, and just one, subseries of measurements on each subject was not followed exactly. More than one series was made on some subjects and none on others. The exact pattern is shown in Table 1.

The core and the initial subseries measurements were made during the women's survey with the subjects wearing panties and bras. It had been anticipated that these measurements would be made in the men's survey with the subjects wearing swimming trunks, but neither swimming nor gym trunks were available in adequate numbers. As a result, the men were measured wearing fatigue pants and underpants. Several measurements which we had planned to include in the men's series were

TABLE 1
DISTRIBUTION OF SAMPLE BY SUBSAMPLE MEMBERSHIP

Core - Subseries 1 only: N = 54
Core - Subseries 1 plus workspace: N = 41
Core - Subseries 1 plus head and face: N = 33
Core - Subseries 1 plus strength: N = 86
Core - Subseries 1 plus workspace and head and face: N = 57
Core - Subseries 1 plus head and face and strength: N = 8
Core - Subseries 1 plus workspace, head and face
and strength: N = 4
Core - Subseries 1 plus workspace and strength: N = 4
Core - Subseries 1 total = 287
Workspace Subseries total = 106
Head and Face Subseries total = 102
Static Strength Subseries total = 102

dropped because the measurers felt it impossible to locate landmarks adequately; other measurements were clearly affected by the clothing. These measurements will be identified in Chapter II.

There were no clothing problems with the workspace and static strength subseries which were measured on both the women and the men with the subjects fully clothed. Clothing was, of course, irrelevant for the head-face subseries. It had not been possible to make the full set of head-face measurements on some women because they were wearing wigs; no similar problem arose in the men's survey.

Measuring techniques, except as they were affected by clothing, were the same in both the men's and women's surveys, and each member of the measuring team made in the men's survey only measurements she had previously made in the women's survey.

The measurements made on the men are listed in Table 2. For each variable, this table includes its full name, a short name (no longer than 18 characters) which will be used in some computer generated tables, and a sequence number. To simplify the simultaneous use of data from the men's and women's surveys, we have assigned the same sequence numbers to the variables measured in the men's survey as had been assigned to that variable in the women's survey. Since the consolidation of the core measurement and traditional anthropometry series resulted in eliminating some measurements in the men's survey there will be irregularities and gaps in the numbering sequences in the summary statistic tables, frequency distribution tables and the XVAL tables. An additional listing of the variable names appears at the end of the report in the Index by Name, Anatomical Location, and Anthropometric Technique. Here, as the name of this index suggests, each variable is listed several times: by its name, by the area of the body it measures, by its beginning and ending landmarks, and by its general class (height, breadth, circumference, and so forth).

The Computational Procedures and Statistical Summaries

The computational and data processing procedures were exactly those used for the women's data and have been explained in detail in Report No. 2 (Churchill, E., T. Churchill, J. T. McConville, and R. M. White. 1977. Anthropometry of Women of the U. S. Army--1977, Report No. 2 - The Basic Univariate Statistics. Technical Report NATICK/TR-77/024, Natick Research and Development Command, Natick, Massachusetts). The statistical summaries are, as well, those described in that report, with some differences in the manner of presentation. In Chapters II-V we have listed for each measurement its mean, standard deviation, coefficient of variation and 13 percentiles: 5th, 10th, 15th, 20th, 25th, 35th, 50th, 65th, 75th, 80th, 85th, 90th, and

TABLE 2
LIST OF MEASUREMENT NAMES AND SEQUENCE NUMBERS

	SHORT NAME	LONG NAME
9T	ACROMION-RADIALE L	ACROMION-RADIALE LENGTH
40C	ANKLE CIRCUMFERENCE	ANKLE CIRCUMFERENCE
4C	AXILLA HEIGHT	AXILLA HEIGHT
44C	BACK CURVATURE-CHEST	BACK CURVATURE-CHEST
46C	BACK CURVATURE-HIP	BACK CURVATURE-HIP
45C	BACK CURVATURE-WAIST	BACK CURVATURE-WAIST
13W	BENT KNEE HEIGHT	BENT KNEE HEIGHT, SUPINE
10W	BENT TORSO BREADTH	BENT TORSO BREADTH
9W	BENT TORSO HEIGHT	BENT TORSO HEIGHT
16T	BIACROMIAL BREADTH	BIACROMIAL BREADTH
34H	BIAURICULAR BR	BIAURICULAR BREADTH
33C	BICEPS CIRC, FLEXED	BICEPS CIRCUMFERENCE, FLEXED
23T	BICEPS CIRC, RELAXED	BICEPS CIRCUMFERENCE, RELAXED
27T	BICEPS SKINFOLD	BICEPS SKINFOLD
27H	BIOCULAR BREADTH	BIOCULAR BREADTH
2H	BITRAGON-CORONAL ARC	BITRAGON-CORONAL ARC
3H	BITRAGON-FRONTAL ARC	BITRAGON-FRONTAL ARC
4H	BITRAGON-MENTON ARC	BITRAGON-MENTON ARC
5H	BITRAGON-SUBMANDIBULAR ARC	BITRAGON-SUBMANDIBULAR ARC
14H	BITRAGON BREADTH	BITRAGON BREADTH
17C	BUTTOCK-KNEE LENGTH	BUTTOCK-KNEE LENGTH
8C	BUTTOCK HEIGHT	BUTTOCK HEIGHT
39C	CALF CIRCUMFERENCE	CALF CIRCUMFERENCE
27C	CHEST CIRCUMFERENCE	CHEST CIRCUMFERENCE
18C	CHEST DEPTH	CHEST DEPTH
5C	CHEST HEIGHT	CHEST HEIGHT
24H	CRINION-MENTON	CRINION-MENTON
33H	EAR BREADTH	EAR BREADTH
32H	EAR LENGTH	EAR LENGTH
16H	ECTOCANTHUS-VERTEX	ECTOCANTHUS TO VERTEX
12H	ECTOCANTHUS-WALL	ECTOCANTHUS TO WALL
14C	ELBOW-FINGERTIP LH	ELBOW-FINGERTIP LENGTH
11T	ELBOW-GRIP LENGTH	ELBOW-GRIP LENGTH
4T	ELBOW (RADIALE) HT	ELBOW (RADIALE) HEIGHT
12C	EYE HEIGHT/SITTING	EYE HEIGHT, SITTING
26H	FACE B/BIZYGOMATIC	FACE BREADTH (BIZYGOMATIC)
23H	FACE LENGTH	FACE LENGTH (SELLION-MENTON)
64C	FOOT BREADTH	FOOT BREADTH
66C	FOOT CIRCUMFERENCE	FOOT CIRCUMFERENCE
62C	FOOT LENGTH	FOOT LENGTH
5W	FUNCTIONAL LEG LN	FUNCTIONAL LEG LENGTH
3W	FUNCTIONAL RECH/EXT	FUNCTIONAL REACH EXTENDED
2W	FUNCTIONAL REACH	FUNCTIONAL REACH
17H	GLABELLA TO VERTEX	GLABELLA TO VERTEX
6H	GLABELLA TO WALL	GLABELLA TO WALL

VARIABLE NUMBER BY SUBSERIES
(C=CORE, T=TRADITIONAL, W=WORKSPACE, H=HEAD & FACE, S=STRENGTH)

TABLE 2
LIST OF MEASUREMENT NAMES AND SEQUENCE NUMBERS

	SHORT NAME	LONG NAME
7T	GLUTEAL FURROW HGT	GLUTEAL FURROW HEIGHT
56C	HAND BREADTH	HAND BREADTH
59C	HAND CIRCUMFERENCE	HAND CIRCUMFERENCE
60C	HAND LENGTH	HAND LENGTH
55C	HEAD BREADTH	HEAD BREADTH
54C	HEAD CIRCUMFERENCE	HEAD CIRCUMFERENCE
15H	HEAD HT/TRAGN-VRTX	HEAD HEIGHT (TRAGION-VERTEX)
56C	HEAD LENGTH	HEAD LENGTH
63C	HEEL-ANKLE CIRCUMF	HEEL-ANKLE CIRCUMFERENCE
30C	HIP CIRCUMFERENCE	HIP CIRCUMFERENCE
14W	HORIZ L/KNEES BENT	HORIZONTAL LENGTH, KNEES BENT
61C	INSTEP LENGTH	INSTEP LENGTH
28H	INTERPUILLARY DIS	INTERPUILLARY DISTANCE
42C	INTERSCYE, BACK	INTERSCYE, BACK
43C	INTERSCYE, FRONT	INTERSCYE, FRONT
11W	KNEELING HEIGHT	KNEELING HEIGHT
12W	KNEELING LEG LNGTH	KNEELING LEG LENGTH
15C	KNEE HEIGHT/SIT	KNEE HEIGHT, SITTING
5T	KNUCKLE HEIGHT	KNUCKLE HEIGHT
10H	LIP PROTRUS* N-WALL	LIP PROTRUSION TO WALL
22H	MENTON TO VERTEX	MENTON TO VERTEX
11H	MENTON TO WALL	MENTON TO WALL
30T	MIDSHOULDER HT/SIT	MIDSHOULDER HEIGHT, SITTING
25H	MINIMUM FRONTAL BR	MINIMUM FRONTAL BREADTH
31H	MOUTH BRTH/SMILING	MOUTH BREADTH, SMILING
30H	NOSE BREADTH	NOSE BREADTH
29H	NOSE LENGTH	NOSE LENGTH (SELLION-SUBNASALE)
8W	OVERHEAD RCH BROTH	OVERHEAD REACH BREADTH
1W	OVERHEAD REACH HGT	OVERHEAD REACH HEIGHT
4W	OVERHEAD REACH/SIT	OVERHEAD REACH, SITTING
57C	PALM LENGTH	PALM LENGTH
16C	POPLITEAL HEIGHT	POPLITEAL HEIGHT
19H	PRONASALE TO VERTX	PRONASALE TO VERTEX
8H	PRONASALE TO WALL	PRONASALE TO WALL
10T	RADIALE-STYLION LH	RADIALE-STYLION LENGTH
1H	SAGITTAL ARC	SAGITTAL ARC
18H	SELLION TO VERTEX	SELLION TO VERTEX
7H	SELLION TO WALL	SELLION TO WALL
13C	SHOULDER-ELBOW LTH	SHOULDER-ELBOW LENGTH
25C	SHOULDER CIRCUMFER	SHOULDER CIRCUMFERENCE
11C	SITTING HEIGHT	SITTING HEIGHT
51C	SLEEVE INSEAM LGTH	SLEEVE INSEAM LENGTH
52C	SLEEVE OUTSEAM LTH	SLEEVE OUTSEAM LENGTH
69C	SPHYRION HEIGHT	SPHYRION HEIGHT
7W	STATURE (CLOTHED)	STATURE (CLOTHED)

VARIABLE NUMBER BY SUBSERIES
(C=CORE, T=TRADITIONAL, W=WORKSPACE, H=HEAD & FACE, S=STRENGTH)

TABLE 2
LIST OF MEASUREMENT NAMES AND SEQUENCE NUMBERS

	SHORT NAME	LONG NAME
2C	STATURE	STATURE
21H	STOMION TO VERTEX	STOMION TO VERTEX
17S	STRNGTH/1H 100CM M1	STRENGTH-ONE HANDED-DOMINANT SIDE-100 CM-MEAN I
18S	STRNGTH/1H 100CM M2	STRENGTH-ONE HANDED-DOMINANT SIDE-100 CM-MEAN II
19S	STRNGTH/1H 100CM P1	STRENGTH-ONE HANDED-DOMINANT SIDE-100 CM-PEAK I
20S	STRNGTH/1H 100CM P2	STRENGTH-ONE HANDED-DOMINANT SIDE-100 CM-PEAK II
25S	STRNGTH/1H 45CM M1 S	STRENGTH-ONE HANDED-SEATED-AT SIDE-45CM-MEAN I
26S	STRNGTH/1H 45CM M2 S	STRENGTH-ONE HANDED-SEATED-AT SIDE-45CM-MEAN II
27S	STRNGTH/1H 45CM P1 S	STRENGTH-ONE HANDED-SEATED-AT SIDE-45CM-PEAK I
28S	STRNGTH/1H 45CM P2 S	STRENGTH-ONE HANDED-SEATED-AT SIDE-45CM-PEAK II
21S	STRNGTH/1H 45CM M1 C	STRENGTH-ONE HANDED-SEATED-CENTERLINE-45CM-MEAN I
22S	STRNGTH/1H 45CM M2 C	STRENGTH-ONE HANDED-SEATED-CENTERLINE-45CM-MEAN II
23S	STRNGTH/1H 45CM P1 C	STRENGTH-ONE HANDED-SEATED-CENTERLINE-45CM-PEAK I
24S	STRNGTH/1H 45CM P2 C	STRENGTH-ONE HANDED-SEATED-CENTERLINE-45CM-PEAK II
29S	STRNGTH/2H 38CM M1	STRENGTH-TWO HANDED PULL-SEATED-38CM-MEAN I
30S	STRNGTH/2H 38CM M2	STRENGTH-TWO HANDED PULL-SEATED-38CM-MEAN II
31S	STRNGTH/2H 38CM P1	STRENGTH-TWO HANDED PULL-SEATED-38CM-PEAK I
32S	STRNGTH/2H 38CM P2	STRENGTH-TWO HANDED PULL-SEATED-38CM-PEAK II
33S	STRNGTH/2H 50CM M1	STRENGTH-TWO HANDED PULL-SEATED-50CM-MEAN I
34S	STRNGTH/2H 50CM M2	STRENGTH-TWO HANDED PULL-SEATED-50CM-MEAN II
35S	STRNGTH/2H 50CM P1	STRENGTH-TWO HANDED PULL-SEATED-50CM-PEAK I
36S	STRNGTH/2H 50CM P2	STRENGTH-TWO HANDED PULL-SEATED-50CM-PEAK II
1S	STRNGTH/2H 38CM M1	STRENGTH-TWO HANDED PULL-38 CM LEVEL-MEAN I
2S	STRNGTH/2H 38CM M2	STRENGTH-TWO HANDED PULL-38 CM LEVEL-MEAN II
3S	STRNGTH/2H 38CM P1	STRENGTH-TWO HANDED PULL-38 CM LEVEL-PEAK I
4S	STRNGTH/2H 38CM P2	STRENGTH-TWO HANDED PULL-38 CM LEVEL-PEAK II
5S	STRNGTH/2H 50CM M1	STRENGTH-TWO HANDED PULL-50 CM LEVEL-MEAN I
6S	STRNGTH/2H 50CM M2	STRENGTH-TWO HANDED PULL-50 CM LEVEL-MEAN II
7S	STRNGTH/2H 50CM P1	STRENGTH-TWO HANDED PULL-50 CM LEVEL-PEAK I
8S	STRNGTH/2H 50CM P2	STRENGTH-TWO HANDED PULL-50 CM LEVEL-PEAK II
9S	STRNGTH/2H 100CM M1	STRENGTH-TWO HANDED PULL-100 CM LEVEL-MEAN I
10S	STRNGTH/2H 100CM M2	STRENGTH-TWO HANDED PULL-100 CM LEVEL-MEAN II
11S	STRNGTH/2H 100CM P1	STRENGTH-TWO HANDED PULL-100 CM LEVEL-PEAK I
12S	STRNGTH/2H 100CM P2	STRENGTH-TWO HANDED PULL-100 CM LEVEL-PEAK II
13S	STRNGTH/2H 150CM M1	STRENGTH-TWO HANDED PUSH-150 CM LEVEL-MEAN I
14S	STRNGTH/2H 150CM M2	STRENGTH-TWO HANDED PUSH-150 CM LEVEL-MEAN II
15S	STRNGTH/2H 150CM P1	STRENGTH-TWO HANDED PUSH-150 CM LEVEL-PEAK I
16S	STRNGTH/2H 150CM P2	STRENGTH-TWO HANDED PUSH-150 CM LEVEL-PEAK II
20H	SUBNASALE TO VERTX	SUBNASALE TO VERTEX
9H	SUBNASALE TO WALL	SUBNASALE TO WALL
25T	SUBSCAPULAR SKINFOLD	SUBSCAPULAR SKINFOLD
3T	SUBSTERNALE HEIGHT	SUBSTERNALE HEIGHT
28T	SUPRAILIAC SKINFOLD	SUPRAILIAC SKINFOLD
2T	SUPRASTERNALE HGT	SUPRASTERNALE HEIGHT
8T	TIBIALE HEIGHT	TIBIALE HEIGHT

VARIABLE NUMBER BY SUBSERIES
(C=CORE, T=TRADITIONAL, W=WORKSPACE, H=HEAD & FACE, S=STRENGTH)

TABLE 2
LIST OF MEASUREMENT NAMES AND SEQUENCE NUMBERS

	SHORT NAME	LONG NAME
13H	TRAGION TO WALL	TRAGION TO WALL
26T	TRICEPS SKINFOLD	TRICEPS SKINFOLD
47C	WAIST BACK LENGTH	WAIST BACK LENGTH
29C	WAIST CIRCUMFERNCE	WAIST CIRCUMFERENCE
19T	WAIST C, OMPHALION	WAIST CIRCUMFERENCE, OMPHALION
19C	WAIST DEPTH	WAIST DEPTH
48C	WAIST FRONT LENGTH	WAIST FRONT LENGTH
6C	WAIST HEIGHT	WAIST HEIGHT
29T	WAIST HT/OMPHALION	WAIST HEIGHT (OMHPALION)
6W	WEIGHT (CLOTHED)	WEIGHT (CLOTHED)
1C	WEIGHT	WEIGHT

VARIABLE NUMBER BY SUBSERIES
(C=CORE, T=TRADITIONAL, W=WORKSPACE, H=HEAD & FACE, S=STRENGTH)

95th. The dimensional values are given in centimeters and inches or in kilograms and pounds. Because of the relatively small sample size, percentiles below the fifth and above the 95th are not given. A few statistics-- β_1 the measure of symmetry, β_2 the measure of kurtosis, standard errors of the mean and standard deviation, and the 30th, 40th, 45th, 55th, 60th, and 70th percentiles--have been relegated to Appendix A.

Staff

The measuring team was made up of the same women from the beginning of the women's survey to the end of the men's survey: Becca Fenton, Jay Frost, Leslie Metcalf, Diann O'Daniel, Becky Sikes, and Elizabeth Wheeler. These women, who had been intensively trained prior to the survey in particular blocks of measurements, made all the core, traditional anthropometry, and head and face measurements. During the period in which men were measured (as well as during the second half of the women's survey), full responsibility for the team's activities was carried by Patricia Reese. With the assistance of Linda Gronwoldt, Ms. Reese made all the workspace measurements and some of the strength measurements. Most of the strength measurements for the men were made by Dr. L. L. Laubach.

The Sample

The 287 men who made up the sample were a very homogeneous group in terms of age, rank, and length of service. With a single exception, they were trainees most of whom had been in the Army less than a month. Most reported that they were 17, 18, or 19 years of age; the median age was close to 19 years. One hundred ninety-one men or 67% were Whites, 90 or 31% Blacks, and 6 or 2% Orientals. Distributions for these variables, place of birth, and handedness are given in Table 3.

TABLE 3a

DISTRIBUTIONS BY SOCIO-MILITARY BACKGROUND VARIABLES

a. RANK

	<u>Total</u>	<u>Work- space</u>	<u>Head & Face</u>	<u>Strength</u>
E-5	1	1	--	
E-4	5	2	1	2
E-3	7	4	5	3
E-2	21	10	9	7
E-1	<u>253</u>	<u>89</u>	<u>87</u>	<u>90</u>
Total	287	106	102	102

b. AGE

	<u>Total</u>	<u>Work- space</u>	<u>Head & Face</u>	<u>Strength</u>
Over 24	8	3	1	3
24	6	2	2	0
23	18	9	6	5
22	9	3	8	1
21	19	9	7	8
20	30	11	11	13
19	55	15	15	22
18	64	26	21	24
17	75	25	30	25
16	<u>3</u>	<u>3</u>	<u>1</u>	<u>1</u>
Total	287	106	102	102

Median 19

c. LENGTH OF SERVICE

	<u>Total</u>	<u>Work- space</u>	<u>Head & Face</u>	<u>Strength</u>
12 years	1	1	0	0
1-6 months	37	17	17	12
0-1 month	<u>249</u>	<u>88</u>	<u>85</u>	<u>90</u>
Total	287	106	102	102

TABLE 3b

DISTRIBUTIONS BY SOCIO-MILITARY BACKGROUND VARIABLES

d. RACE

	Total		Work-space		Head & Face		Strength	
	N	%	N	%	N	%	N	%
White	191	66.6	68	64.2	72	70.6	67	65.7
Black	90	31.4	37	34.9	30	29.4	32	31.4
Oriental	6	2.3	1	0.9	--	--	3	2.9
Total	287		106		102		102	

e. BIRTHPLACE

	Total	Work-space	Head & Face	Strength
New England	12	4	2	4
South Atlantic	54	23	19	20
Mid-Atlantic	49	12	14	22
East North Central	50	18	22	18
East South Central	32	12	10	7
West North Central	16	10	9	5
West South Central	31	13	10	9
Mountain	9	3	3	5
Pacific	23	9	9	7
Foreign	10	2	3	5
Unascertained	1	0	1	0
Total	287	106	102	102

f. HANDEDNESS

	Total
Right Handed	234
Left Handed	33
Ambidextrous	12
Unascertained	8
Total	287

CHAPTER II

THE CORE-SUBSERIES 1 MEASUREMENTS

Forty-four of the core series of measurements and 13 of the traditional measurements (subseries 1) made on the women were included among the measurements for the men. The primary reason for the reduction of the core measurements from 69 to 44 and of the traditional measurements from 28 to 12 was to reduce the time required for making these measurements so that the time needed for the combined core-subseries 1 list of measurements would be about what the full core series had required. Despite this reduction, the present series provides a fairly comprehensive anthropometric description of the men in our survey sample. The survey blank for the combined core-subseries 1 set of measurements appears in Figure 1.

These measurements were composed of 13 standing heights: stature, axilla, chest, waist (natural waistline), waist (omphalion), buttock, sphyrion, substernale, suprasternale, elbow, knuckle, gluteal furrow and tibiale; five seated heights, sitting, eye, knee, popliteal and midshoulder; five major torso circumferences: shoulder, chest, waist (natural waistline), waist (omphalion) and hip; two leg circumferences: calf and ankle; and two arm circumferences: biceps, flexed, and biceps, relaxed, were measured. An additional seven surface measurements: interscye front, interscye back, waist front, waist back, and back curvature at chest, waist and hip level, were made on the torso. Measurements on the extremities included length, breadth and circumference on the head, the hand, and the foot, plus palm length, instep length, and heel-ankle circumference. Eight measurements involved arm or leg lengths: sleeve inseam, sleeve outseam, acromion-radiale length, radiale-styilion length, shoulder-elbow, elbow-fingertip, elbow-center of grip and buttock-knee length. Two depths, chest and waist, one breadth, biacromial breadth, and weight completed the list.

Four measurements, originally scheduled for inclusion in this series--abdominal extension depth, thigh-to-thigh breadth, bispinous breadth, and hip (trochanteric) height were deleted because of difficulties in making them on subjects wearing pants.

Waist height at omphalion and midshoulder height, sitting, which had been measured on only a small number of subjects in the women's sample, were measured on all subjects in the men's survey.

Measurements on the men were made, as we have already stated, with the subjects wearing fatigue pants. This clothing can be assumed to have had some effect on a number of the measurements, particularly weight, buttock height, popliteal height, buttock-knee length, back curvature-hip level, and hip circumference. The fatigue pants typically

ARMY CORPS ANTHROPOMETRIC SURVEY BLANK - 1976/1977

(Please print all requested information)

Subject No. _____

Name _____
(Last) (First) (Middle)

Date _____

Rank _____

Location _____

MOS: Primary _____ Secondary _____

Length of Service _____
(years) (months)

What is your primary duty? _____

Age at Last Birthday _____

Command _____

Birthdate _____
(year) (month) (day)

Handedness: R L A
(circle appropriate symbol)

Place of Birth _____
State (country if other than USA)

Estimated Nude Height _____ (inches)

Estimated Nude Weight _____ (pounds)

GROUP I

(Standing)

1. Stature _____
2. Axilla Ht _____
3. Suprasternale Ht _____
4. Chest Ht _____
5. Substernale Ht _____
6. Waist Ht/Natural _____
7. Waist Ht/Omphalion _____
8. Elbow Ht _____
9. Buttock Ht _____
10. Acromion-Radiale _____
11. Radiale-Stylian _____
12. Chest Depth _____

(Seated on Table)

13. Sitting Ht _____
14. Eye Ht _____
15. Midshoulder Ht _____
16. Knee Ht _____
17. Popliteal Ht _____
18. Shoulder-Elbow Lgth _____
19. Elbow-Fingertip Lgth _____
20. Elbow-Center of Grip Lgth _____
21. Buttock-Knee Lgth _____
22. Biacromial Breadth _____

GROUP II

(Seated)

23. Head Circumference _____
24. Head Length _____
25. Head Breadth _____
26. Hand Circumference _____
27. Hand Breadth _____
28. Hand Length _____
29. Palm Length _____
30. Abdominal Ext Depth _____
31. Thigh-to-Thigh Breadth _____

(Standing on Table)

32. Bispinous Breadth _____
33. Knuckle Ht _____
34. Gluteal Furrow Ht _____
35. Trochanteric Ht _____
36. Tibiale Ht _____
37. Hip Circ _____
38. Calf Circ _____
39. Ankle Circ _____
40. Heel-Ankle Circ _____
41. Foot Circ _____
42. Sphyrion Ht _____
43. Foot Length _____
44. Instep Length _____
45. Foot Breadth _____

GROUP III

46. Weight _____
47. Biceps Circ, Relaxed _____
48. Biceps Circ, Flexed _____
49. Sleeve Inseam _____
50. Sleeve Outseam _____
51. Shoulder Circ _____
52. Chest Circ _____
53. Waist Circ/Natural _____
54. Waist Circ/Omphalion _____
55. Interscye Front _____
56. Waist Front _____
57. Interscye Back _____
58. Waist Back _____
59. Back Curvature, Chest Level _____
60. Back Curvature, Waist Level _____
61. Back Curvature, Hip Level _____

Figure 1. The survey blank: core and subseries 1 measurements.

weigh about one kilogram; the user of these data who wishes to do so can subtract this amount from the mean and percentiles given here for weight. The effect of the clothing on the other measurements was judged to be within the accuracy of measurement. All unilateral measurements were made on the subject's right side.

Definitions of the measurements follow. The basic summary statistics are given in Table 4. In Table 4, the mean, the standard deviation, and the percentile vlaues for weight are shown in pounds in the upper line and in kilograms in the lower line. For all other measurements, the mean, the standard deviation, and the percentile values are shown in centimeters in the upper line and in inches in the lower line.

Additional statistics are included in Appendix A, frequency tables in Appendix B, and XVAL computer printouts in Appendix C. Illustrations of these measurements have been provided in both the first and second reports of this series and thus are not repeated here.

DEFINITIONS FOR THE CORE-SUBSERIES 1 MEASUREMENTS

WEIGHT: Weight of subject wearing fatigue pants.

STATURE: The vertical distance from the floor to the top of the head.

AXILLA HEIGHT: The vertical distance from the floor to the center of the armpit.

SUPRASTERNALE HEIGHT: The vertical distance from the floor to supra-sternale, the lowest point of the notch in the upper edge of the breastbone.

CHEST HEIGHT: The vertical distance from the floor to the tip of the nipples.

SUBSTERNALE HEIGHT: The vertical distance from the floor to sub-sternale, the midpoint of the lower edge of the breastbone.

ELBOW (RADIALE) HEIGHT: The vertical distance from the floor to radiale, the depression between the humerus and the radius.

KNUCKLE HEIGHT: The vertical distance from the floor to the largest knuckle where the first phalanx of the middle finger joins the palm.

WAIST HEIGHT (NATURAL): The vertical distance from the floor to the natural waist level.

BUTTOCK HEIGHT: The vertical distance from the floor to the point of maximum protrusion of the buttock.

GLUTEAL FURROW HEIGHT: The vertical distance from the floor to the furrow where the gluteal curve intersects the back of the thigh.

TIBIALE HEIGHT: The vertical distance from the floor to the proximal medial margin of the shin bone.

ACROMION-RADIALE LENGTH: The distance, parallel to the axis of the upper arm, from the tip of the shoulder blade to the uppermost point of the radius.

RADIALE-STYLION LENGTH: The distance, parallel to the axis of the forearm, from the uppermost point of the radius to the most distal point of the styloid process of the radius.

SITTING HEIGHT: The vertical distance from the sitting surface to the top of the head.

EYE HEIGHT, SITTING: The vertical distance from the sitting surface to the outer corner of the eye.

SHOULDER-ELBOW LENGTH: The vertical distance from acromion, the lateral edge of the acromial process of the shoulder, to the underside of the elbow, measured with the upper arms relaxed and the forearms and hands extended forward and horizontally.

ELBOW GRIP LENGTH: The distance parallel to the axis of the forearm from the tip of the elbow to the midpoint of the fist measured with the upper arm hanging relaxed, the forearm extended forward, and the hand grasping the fixed blade of a beam caliper.

ELBOW-FINGERTIP LENGTH: The distance from the tip of the right elbow to the tip of the middle finger, measured with the upper arm hanging relaxed, the forearm and hand extended forward and horizontally.

KNEE HEIGHT, SITTING: The vertical distance from the footrest surface to a point on the thigh five centimeters proximal to the anterior surface of the patella.

POPLITEAL HEIGHT: The vertical distance from the footrest surface to the lateral underside of the thigh where the tendon of the biceps femoris joins the lower leg.

BUTTOCK-KNEE LENGTH: The horizontal distance from the most posterior protrusion of the buttock to the most anterior point of the kneecap.

CHEST DEPTH: The depth of the torso at nipple level.

WAIST DEPTH: The anterior-posterior depth of the torso at the level of the waist.

BIACROMIAL BREADTH: The horizontal distance between the lateral edges of the acromial processes of the shoulders.

SHOULDER CIRCUMFERENCE: The horizontal circumference of the shoulders measured at the level of the greatest lateral protrusion of the deltoid muscles.

CHEST CIRCUMFERENCE: The horizontal circumference of the trunk measured with the tape passing over the nipples.

WAIST CIRCUMFERENCE (NATURAL); The horizontal circumference of the waist at the 'natural' waist level.

WAIST CIRCUMFERENCE (OMPHALION); The horizontal circumference of the waist at the level of the midpoint of the navel.

HIP CIRCUMFERENCE: The maximum circumference of the hips at the level of the maximum posterior protrusion of the buttocks, measured over fatigue pants.

BICEPS CIRCUMFERENCE, RELAXED: The circumference of the arm at the biceps level measured in a plane perpendicular to the long axis of the upper arm.

BICEPS CIRCUMFERENCE, FLEXED: The circumference of the arm at the level of the maximal protrusion of the biceps, measured with the elbow flexed 90 degrees, the upper arm horizontal, and the fist tightly clenched.

CALF CIRCUMFERENCE: The maximum circumference of the calf.

ANKLE CIRCUMFERENCE: The minimum circumference of the ankle.

INTERSCYE BACK: The surface distance across the back of the torso between points midway between the posterior edges of the armpits and the acromiale points.

INTERSCYE FRONT: The surface distance across the front of the torso between points midway between the anterior edges of the armpit and the acromiale points.

BACK CURVATURE-CHEST LEVEL: The surface distance across the back between the midaxillary lines at the level of the nipples.

BACK CURVATURE-WAIST LEVEL: The surface distance across the back between the midaxillary lines at waist level.

BACK CURVATURE-HIP LEVEL: The surface distance across the back between the midaxillary lines at the level of the maximum protrusion of the buttocks.

WAIST BACK LENGTH: The surface distance from the waist to cervicale.

WAIST FRONT LENGTH: The surface distance from the waist to the anterior neck-torso juncture.

SLEEVE INSEAM LENGTH: The distance from the anterior edge of the armpit to the little finger side of the wrist, measured with the arm slightly abducted, the palm held forward, and the tape tense.

SLEEVE OUTSEAM LENGTH: The distance from acromiale to the thumb side of the wrist measured with the arm slightly abducted, the palm held forward, and the tape tense.

HEAD CIRCUMFERENCE: The maximum circumference of the head measured with the tape passing above the brow ridges and nuchale.

HEAD LENGTH: The maximum length of the head from the most anterior point between the brow ridges to the occiput.

HEAD BREADTH: The maximum breadth of the head above the level of the ears.

HAND LENGTH: The distance from the wrist crease to dactylion, measured parallel to the long axis of the hand.

PALM LENGTH: The distance from the wrist crease to the skin crease at the base of the third finger, measured parallel to the long axis of the hand.

HAND BREADTH: The breadth across the distal ends of the metacarpale bones.

HAND CIRCUMFERENCE: The circumference measured around the metacarpal-phalangeal joints.

FOOT LENGTH: The length of the foot measured parallel to its long axis.

INSTEP LENGTH: The distance measured parallel to the long axis of the foot, from the level of the heel to the point of maximum medial protuberance of the foot.

FOOT BREADTH: The maximum breadth of the foot as measured at right angles to its long axis.

FOOT CIRCUMFERENCE: The circumference of the foot as measured around the distal ends of the protuberances of the metatarsal bones.

HEEL-ANKLE CIRCUMFERENCE: The diagonal circumference of the foot measured with the tape passing under the tip of the heel and over the instep at the foot-leg junction.

SPHYRION HEIGHT: The height of the most distal extension of the tibia on the inside of the foot.

MIDSHOULDER HEIGHT: The vertical distance from the seated surface to the point on the shoulder midway between acromion and the shoulder-neck intersection.

WAIST HEIGHT (OMPHALION): The vertical distance from the floor to the middle of the navel.

TABLE 4

BASIC SUMMARY STATISTICS
THE CORE-SUBSERIES 1 MEASUREMENTS

MEAN	STD DEV	-V- -N-	- - - THE PERCENTILES - - -										
			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
1C WEIGHT													
156.02	24.22	15.5%	122.4	130.1	133.5	138.1	143.4	151.3	161.2	172.6	183.5	192.7	200.2
70.77	10.98	287	55.5	59.0	60.6	62.7	65.0	68.6	73.1	78.3	83.2	87.4	90.8
2C STATURE													
174.07	6.82	3.9%	162.8	165.6	167.3	169.8	171.7	174.1	176.5	178.4	180.8	182.6	185.3
68.53	2.68	287	64.1	65.2	65.9	66.8	67.6	68.5	69.5	70.2	71.2	71.9	73.0
4C AXILLA HEIGHT													
131.24	5.89	4.5%	121.5	123.9	125.4	127.5	129.2	131.3	133.4	135.1	137.2	138.7	140.9
51.67	2.32	287	47.8	48.8	49.4	50.2	50.9	51.7	52.5	53.2	54.0	54.6	55.5
2T SUPRASTERNAL HEIGHT													
142.70	6.09	4.3%	132.6	135.0	136.6	138.8	140.5	142.7	145.0	146.7	148.9	150.4	152.7
50.18	2.40	287	52.2	53.2	53.8	54.6	55.3	56.2	57.1	57.8	58.6	59.2	60.1
5C CHEST HEIGHT													
127.43	5.67	4.5%	117.9	120.1	121.6	123.7	125.4	127.5	129.6	131.2	133.2	134.5	136.5
53.17	2.23	287	46.4	47.3	47.9	48.7	49.4	50.2	51.0	51.7	52.4	53.0	53.7
3T SUBSTERNAL HEIGHT													
122.57	5.49	4.5%	113.4	115.7	117.1	119.1	120.6	122.6	124.7	126.2	128.2	129.5	131.5
48.25	2.16	287	44.7	45.5	46.1	46.9	47.5	48.3	49.1	49.7	50.5	51.0	51.8
4T ELBOW (RADIAL) HEIGHT													
109.40	5.05	4.6%	101.0	103.0	104.3	106.1	107.5	109.4	111.3	112.7	114.5	115.6	117.8
43.07	1.99	287	39.8	40.6	41.1	41.8	42.3	43.1	43.8	44.4	45.1	45.6	46.4
5T KNUCKLE HEIGHT													
75.51	4.11	5.5%	68.8	70.3	71.3	72.8	73.9	75.5	77.0	78.2	79.7	80.7	82.2
29.73	1.62	287	27.1	27.7	28.1	28.7	29.1	29.7	30.3	30.8	31.4	31.8	32.4
6C WAIST HEIGHT													
104.12	5.75	5.5%	94.0	96.6	98.0	100.1	101.8	104.1	106.4	108.1	110.2	111.6	113.6
40.99	2.26	287	37.2	38.0	38.6	39.4	40.1	41.0	41.9	42.6	43.4	43.9	44.7
8C BUTTOCK HEIGHT													
89.41	5.07	5.7%	80.8	82.8	84.1	86.1	87.6	89.5	91.4	92.8	94.5	95.7	97.6
32.20	2.00	287	31.8	32.6	33.1	33.9	34.5	35.3	36.0	36.5	37.2	37.7	38.4

TABLE 4

BASIC SUMMARY STATISTICS
THE CORE-SUBSERIES 1 MEASUREMENTS

MEAN	STD DEV	-V- -N-	- - - THE PERCENTILES - - -										
			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
7T GLUTEAL FURROW HEIGHT													
80.37	4.42	5.5%	73.3	74.8	75.8	77.3	78.6	80.3	81.9	83.2	84.9	86.0	87.7
31.64	1.74	287	28.8	29.4	29.8	30.5	30.9	31.6	32.3	32.8	33.4	33.9	34.5
8T TIBIALE HEIGHT													
48.31	2.77	5.7%	43.5	44.8	45.5	46.6	47.3	48.4	49.4	50.2	51.1	51.8	52.8
19.02	1.09	283	17.1	17.6	17.9	18.3	18.6	19.0	19.4	19.7	20.1	20.4	20.8
9T ACROMION-RADIALC LENGTH													
33.74	1.82	5.4%	30.8	31.4	31.9	32.5	33.0	33.7	34.4	35.0	35.7	36.1	36.8
13.28	.72	287	12.1	12.4	12.6	12.8	13.0	13.3	13.6	13.8	14.0	14.2	14.5
10T RADIAL-STYLION LENGTH													
26.84	1.57	5.9%	24.4	25.0	25.3	25.8	26.2	26.8	27.4	27.9	28.5	29.0	29.6
11.57	.62	287	9.6	9.8	10.0	10.2	10.3	10.5	10.8	11.0	11.2	11.4	11.7
11C SITTING HEIGHT													
89.34	3.63	4.1%	83.5	84.3	85.8	87.0	88.0	89.3	90.6	91.7	93.0	94.0	95.4
35.17	1.43	287	32.9	33.4	33.8	34.3	34.6	35.2	35.7	36.1	36.6	37.0	37.6
12C EYE HEIGHT, SITTING													
77.42	3.39	4.4%	72.0	73.3	74.1	75.3	76.1	77.3	78.6	79.6	80.9	81.8	83.2
30.48	1.34	287	28.3	28.9	29.2	29.6	30.0	30.4	30.9	31.3	31.8	32.2	32.8
13C SHOULDER-ELBOW LENGTH													
30.32	1.85	5.1%	33.3	34.0	34.5	35.1	35.6	36.3	37.0	37.5	38.2	38.7	39.5
14.30	.73	287	13.1	13.4	13.6	13.8	14.0	14.3	14.6	14.8	15.1	15.2	15.5
11T ELBOW-GRIP LENGTH													
34.97	1.96	5.6%	31.7	32.5	33.0	33.7	34.2	35.0	35.7	36.2	36.9	37.5	38.3
13.77	.77	287	12.5	12.8	13.0	13.3	13.5	13.8	14.1	14.3	14.5	14.8	15.1
14C ELBOW-FINGERTIP LENGTH													
47.77	2.47	5.2%	43.8	44.8	45.4	46.2	46.9	47.7	48.5	49.4	50.3	51.0	52.0
13.81	.97	287	17.3	17.7	17.9	18.2	18.4	18.8	19.1	19.4	19.8	20.1	20.5
15C KNEE HEIGHT, SITTING													
59.10	3.02	5.5%	50.2	51.4	52.1	53.2	54.0	55.1	56.2	57.1	58.2	59.0	60.2
21.69	1.19	287	19.8	20.2	20.5	20.9	21.3	21.7	22.1	22.5	22.9	23.2	23.7

TABLE 4

BASIC SUMMARY STATISTICS
THE CORE-SUBSERIES 1 MEASUREMENTS

MEAN	STD DEV	-V- -N-	- - - THE PERCENTILES - - -										
			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
16C POPLITEAL HEIGHT													
44.27	2.72	6.1%	39.7	40.8	41.5	42.5	43.3	44.3	45.3	46.1	47.1	47.7	48.7
17.43	1.07	287	15.6	16.1	16.3	16.7	17.0	17.4	17.8	18.1	18.5	18.8	19.2
17C BUTTOCK-KNEE LENGTH													
60.78	3.07	5.1%	55.7	56.8	57.6	58.7	59.6	60.8	62.0	62.9	64.0	64.8	65.8
23.93	1.21	287	21.9	22.4	22.7	23.1	23.5	23.9	24.4	24.8	25.2	25.5	25.9
18C CHEST DEPTH													
21.68	2.00	9.2%	18.9	19.4	19.7	20.2	20.6	21.4	22.2	23.0	23.9	24.6	25.5
8.54	.79	287	7.5	7.6	7.8	7.9	8.1	8.4	8.8	9.0	9.4	9.7	10.1
19C WAIST DEPTH													
20.29	2.25	11.1%	17.5	17.9	18.2	18.6	19.1	19.8	20.8	21.6	22.7	23.5	24.8
7.99	.89	280	6.9	7.0	7.2	7.3	7.5	7.8	8.2	8.5	8.9	9.3	9.8
16T BIACROMIAL BREADTH													
39.46	1.98	5.3%	36.1	36.9	37.4	38.1	38.7	39.5	40.3	40.9	41.5	42.0	42.6
15.53	.78	287	14.2	14.5	14.7	15.0	15.3	15.6	15.9	16.1	16.4	16.5	16.8
25C SHOULDER CIRCUMFERENCE													
117.92	6.14	5.5%	101.4	103.2	104.5	106.5	108.2	110.6	113.1	115.0	117.4	119.1	121.5
43.67	2.42	287	39.9	40.6	41.1	41.9	42.6	43.5	44.5	45.3	46.2	46.9	47.8
27C CHEST CIRCUMFERENCE													
92.90	6.60	7.1%	83.8	85.2	86.2	87.9	89.5	91.9	94.7	97.0	100.2	102.4	105.6
36.58	2.60	287	33.0	33.6	34.0	34.6	35.2	36.2	37.3	38.2	39.4	40.3	41.6
29C WAIST CIRCUMFERENCE													
70.08	8.04	10.2%	68.8	70.2	71.1	72.8	74.4	76.9	80.1	82.9	86.8	89.8	94.5
30.97	3.17	287	27.1	27.6	28.0	28.7	29.3	30.3	31.5	32.6	34.2	35.3	37.2
19T WAIST CIRCUMFERENCE, OMPHALION													
70.87	8.29	10.5%	68.4	70.4	71.7	73.4	74.8	76.5	79.5	83.1	87.0	91.5	95.9
31.00	3.27	287	26.9	27.7	28.2	28.9	29.4	30.1	31.3	32.7	34.3	36.0	37.8
30C HIP CIRCUMFERENCE													
95.14	6.04	6.4%	87.3	88.3	89.1	90.5	91.9	94.1	96.7	98.8	101.7	103.8	106.9
37.40	2.38	287	34.4	34.8	35.1	35.6	36.2	37.0	38.1	38.9	40.1	40.9	42.1

TABLE 4
BASIC SUMMARY STATISTICS
THE CORE-SUBSERIES 1 MEASUREMENTS

	STD	-V-	- - - THE PERCENTILES - - -													
MEAN	DEV	-N-	5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH			
23T BICEPS CIRCUMFERENCE, RELAXED																
29.16	2.77	9.5%	24.8	25.6	26.2	27.2	28.0	29.0	30.2	31.1	32.1	32.9	33.9			
12.48	1.09	287	9.8	10.1	10.3	10.7	11.0	11.4	11.9	12.2	12.7	12.9	13.4			
33C BICEPS CIRCUMFERENCE, FLEXED																
31.38	2.71	8.7%	27.0	27.9	28.5	29.4	30.2	31.3	32.4	33.2	34.3	35.0	36.0			
12.35	1.07	287	10.6	11.0	11.2	11.6	11.9	12.3	12.8	13.1	13.5	13.8	14.2			
39C CALF CIRCUMFERENCE																
35.83	2.90	7.8%	31.0	32.4	33.0	33.9	34.6	35.6	36.7	37.6	38.8	39.7	40.9			
14.10	1.10	287	12.4	12.8	13.0	13.3	13.6	14.0	14.5	14.6	15.3	15.6	16.1			
40C ANKLE CIRCUMFERENCE																
21.71	1.42	8.6%	19.3	19.8	20.2	20.7	21.2	21.7	22.3	22.7	23.1	23.5	24.0			
8.55	.90	287	7.0	7.3	7.9	8.2	8.3	8.6	8.8	8.9	9.1	9.2	9.5			
42C INTERSCYE, BACK																
41.02	2.81	6.9%	36.5	37.4	38.1	39.1	39.9	41.0	42.1	43.0	44.0	44.8	45.9			
16.15	1.11	287	14.4	14.7	15.0	15.4	15.7	16.1	16.6	16.9	17.3	17.6	18.1			
43C INTERSCYE, FRONT																
36.67	1.96	5.3%	33.5	34.1	34.6	35.3	35.8	36.6	37.4	38.0	38.8	39.3	40.1			
14.44	.77	287	13.2	13.4	13.6	13.9	14.1	14.4	14.7	15.0	15.3	15.5	15.8			
44C BACK CURVATURE-CHEST																
45.17	3.37	7.5%	40.5	41.2	41.7	42.6	43.4	44.7	46.1	47.3	48.9	50.0	51.5			
17.78	1.33	287	16.0	16.2	16.4	16.8	17.1	17.6	18.2	18.6	19.2	19.7	20.3			
45C BACK CURVATURE-WAIST																
38.96	4.28	11.0%	33.5	34.4	35.0	36.0	36.9	38.2	39.7	41.0	43.0	44.5	47.0			
15.34	1.68	287	13.2	13.6	13.8	14.2	14.5	15.0	15.6	16.2	16.9	17.5	18.5			
46C BACK CURVATURE-HIP																
46.57	3.13	6.7%	42.4	43.0	43.4	44.2	44.9	46.0	47.4	48.5	49.9	51.0	52.5			
18.33	1.23	287	16.7	16.9	17.1	17.4	17.7	18.1	18.7	19.1	19.7	20.1	20.7			
47C WAIST BACK LENGTH																
44.90	3.20	7.1%	39.6	40.7	41.5	42.6	43.6	44.9	46.2	47.1	48.4	49.2	50.3			
17.68	1.26	287	15.6	16.0	16.3	16.8	17.2	17.7	18.2	18.6	19.0	19.4	19.8			

TABLE 4

BASIC SUMMARY STATISTICS
THE CORE-SUBSERIES 1 MEASUREMENTS

	STD	-V-	- - - THE PERCENTILES - - -													
MEAN	DEV	-N-	5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH			
48C WAIST FRONT LENGTH																
41.05	3.03	7.4%	36.1	37.1	37.9	38.9	39.8	41.0	42.2	43.1	44.3	45.1	46.2			
16.16	1.19	287	14.2	14.6	14.9	15.3	15.7	16.1	16.6	17.0	17.4	17.7	18.2			
51C SLEEVE INSEAM LENGTH																
48.26	2.73	5.7%	43.9	44.9	45.5	46.4	47.2	48.2	49.2	50.1	51.1	51.8	52.9			
19.00	1.07	287	17.3	17.7	17.9	18.3	18.6	19.0	19.4	19.7	20.1	20.4	20.8			
52C SLEEVE OUTSEAM LENGTH																
58.77	3.23	5.5%	53.8	54.9	55.5	56.6	57.4	58.6	59.9	60.9	62.3	63.2	64.5			
23.14	1.27	287	21.2	21.6	21.9	22.3	22.6	23.1	23.6	24.0	24.5	24.9	25.4			
54C HEAD CIRCUMFERENCE																
56.01	1.03	2.9%	53.2	53.9	54.3	55.0	55.4	56.1	56.7	57.1	57.7	58.0	58.6			
22.05	.64	287	21.0	21.2	21.4	21.6	21.8	22.1	22.3	22.5	22.7	22.9	23.1			
55C HEAD BREADTH																
15.06	.54	3.6%	14.2	14.4	14.5	14.7	14.9	15.1	15.3	15.4	15.6	15.7	16.0			
5.93	.21	287	5.6	5.7	5.7	5.8	5.9	5.9	6.0	6.1	6.1	6.2	6.3			
56C HEAD LENGTH																
19.47	.70	3.6%	18.3	18.6	18.8	19.0	19.2	19.5	19.7	19.9	20.2	20.3	20.6			
7.66	.28	287	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.8	7.9	8.0	8.1			
57C PALM LENGTH																
10.75	.58	5.4%	9.8	10.0	10.2	10.4	10.5	10.8	11.0	11.2	11.4	11.5	11.7			
4.23	.23	287	3.9	3.9	4.0	4.1	4.1	4.2	4.3	4.4	4.5	4.5	4.6			
58C HAND BREADTH																
8.92	.43	4.8%	8.3	8.4	8.5	8.6	8.7	8.9	9.1	9.2	9.4	9.5	9.7			
3.51	.17	287	3.3	3.3	3.3	3.4	3.4	3.5	3.6	3.6	3.7	3.8	3.8			
59C HAND CIRCUMFERENCE																
21.11	1.10	4.7%	19.5	19.9	20.1	20.5	20.7	21.1	21.5	21.8	22.2	22.4	22.8			
8.31	.39	287	7.7	7.8	7.9	8.1	8.2	8.3	8.5	8.6	8.7	8.8	9.0			
60C HAND LENGTH																
19.00	.99	5.2%	17.4	17.8	18.0	18.3	18.6	19.0	19.4	19.7	20.1	20.3	20.6			
7.43	.39	287	6.9	7.0	7.1	7.2	7.3	7.5	7.6	7.8	7.9	8.0	8.1			

TABLE 4

BASIC SUMMARY STATISTICS
THE CORE-SUBSERIES 1 MEASUREMENTS

MEAN	STD DEV	-V- -N-	- - - THE PERCENTILES - - -										
			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
61C INSTEP LENGTH													
19.71	1.18	6.0%	17.7	18.2	18.5	18.9	19.2	19.7	20.2	20.5	21.0	21.2	21.7
7.76	.46	286	7.0	7.2	7.3	7.4	7.6	7.8	7.9	8.1	8.3	8.4	8.5
62C FOOT LENGTH													
26.76	1.33	5.0%	24.5	25.0	25.4	25.9	26.2	26.8	27.3	27.7	28.2	28.5	28.9
10.53	.52	286	9.7	9.9	10.0	10.2	10.3	10.5	10.8	10.9	11.1	11.2	11.4
63C HEEL-ANKLE CIRCUMFERENCE													
34.02	1.74	5.1%	31.3	31.9	32.3	32.9	33.3	33.9	34.6	35.2	35.9	36.4	37.0
13.39	.69	287	12.3	12.6	12.7	12.9	13.1	13.4	13.6	13.8	14.1	14.3	14.6
64C FOOT BREADTH													
9.92	.56	5.7%	9.0	9.2	9.4	9.6	9.7	9.9	10.1	10.3	10.5	10.7	10.9
3.90	.22	286	3.5	3.6	3.7	3.8	3.8	3.9	4.0	4.1	4.1	4.2	4.3
66C FOOT CIRCUMFERENCE													
25.15	1.29	5.1%	23.2	23.6	23.9	24.3	24.6	25.1	25.6	26.0	26.6	26.9	27.4
9.90	.51	287	9.1	9.3	9.4	9.6	9.7	9.9	10.1	10.2	10.5	10.6	10.8
69C SPHYRION HEIGHT													
7.38	.61	8.3%	6.4	6.6	6.7	7.0	7.2	7.4	7.6	7.8	8.0	8.2	8.4
2.91	.24	286	2.5	2.6	2.7	2.7	2.8	2.9	3.0	3.1	3.2	3.2	3.3
23T WAIST HEIGHT, OMPHALION													
105.47	5.27	5.0%	96.6	98.8	100.1	102.0	103.5	105.4	107.4	109.0	111.0	112.3	114.2
41.52	2.07	287	38.3	38.9	39.4	40.2	40.7	41.5	42.3	42.9	43.7	44.2	45.0
30T MIDSHOULDER HT/SIT													
61.39	3.03	4.9%	56.0	57.7	58.4	59.4	60.2	61.3	62.5	63.4	64.6	65.4	66.6
24.17	1.19	287	22.3	22.7	23.0	23.4	23.7	24.1	24.6	25.0	25.4	25.7	26.2

CHAPTER II

SUBSERIES 2: THE WORKSPACE MEASUREMENTS

The 14 workspace measurements which constituted subseries 2 were measured on a sample of 106 men. There were no differences in the measurements or the measurement procedures from those used in the women's survey. Subjects were fully clothed in all instances. For the men, clothing always consisted of fatigues and boots. The measurements in this series are listed on its survey blank, Figure 2.

Like the total sample, the workspace subsample consisted mainly of trainees, over four-fifths with ratings of E-1. The subsample was almost two-thirds White and about one-third Black, and like the full sample, had a median age rather close to 19 years. The following figures provide a comparison of the statures and weights of the total sample and this subsample:

	<u>Workspace Subsample</u>	<u>Total Sample</u>
Weight	$\bar{X} = 69.66 \sigma = 9.85 \text{ (kg)}$	$\bar{X} = 70.92 \sigma = 11.01 \text{ (kg)}$
Stature	$\bar{X} = 174.06 \sigma = 6.44 \text{ (cm)}$	$\bar{X} = 174.07 \sigma = 6.82 \text{ (cm)}$

Definitions of these measurements appear on the following pages. Summary statistics are given in Table 5. In Table 5, the mean, the standard deviation, and the percentile values for weight are shown in pounds in the upper line and in kilograms in the lower line. For all other measurements, the mean, the standard deviation, and the percentile values are shown in centimeters in the upper line and in inches in the lower line.

Additional statistics are included in Appendix A, frequency tables in Appendix B, and XVAL computer printouts in Appendix C. Illustrations of these measurements have been provided in both the first and second reports of this series and thus are not repeated here.

ARMY CORPS ANTHROPOMETRIC SURVEY BLANK - 1976/1977

(Please print all requested information)

Subject No. _____ Social Security No. _____

Name _____ Location _____

(Last) (First) (Middle)

Shoes _____

Boots _____

Sub-Series #2

Anthropometry of Working Positions

1. Weight			
2. Stature			
3. Functional Reach			
4. Functional Reach, Extended			
5. Overhead Reach Height			
6. Overhead Reach Breadth			
7. Bent Torso Height			
8. Bent Torso Breadth			
9. Overhead Reach, Sitting			
10. Functional Leg Length			
11. Kneeling Height			
12. Kneeling Leg Length			
13. Bent Knee Height, Supine			
14. Horizontal Length, Knees Bent			
15. _____			
16. _____			
17. _____			
18. _____			

Figure 2. The survey blank: workspace subseries.

DEFINITIONS FOR THE WORKSPACE MEASUREMENTS

OVERHEAD REACH HEIGHT: The vertical distance from the floor to the highest point on the first phalanges when the subject stands 15 centimeters in from the wall, his arms extended overhead, fists together and against the wall and the first phalanges horizontal.

FUNCTIONAL REACH: The horizontal distance from the wall to the tip of the thumb measured with the subject's back against the wall, his arm horizontal, and the tip of the index finger touching the palm of the thumb.

FUNCTIONAL REACH, EXTENDED: The distance from the wall to the tip of the right thumb measured with the left shoulder in firm contact with the wall, the right shoulder extended as far as possible, the arm held horizontal and the tip of the index finger touching the palm of the thumb.

OVERHEAD REACH, SITTING: The height of the tip of the middle finger above the sitting surface measured with the subject sitting erect, his right side against a wall, left hand in his lap, his right arm and hand extended upward and his palm against the wall.

FUNCTIONAL LEG LENGTH: The distance along the main axis of the leg from the bottom of the foot to the posterior torso surface, measured with the leg extended and the knee straightened using an anthropometer whose base is in firm contact with the foot's plantar surface.

WEIGHT (CLOTHED): The weight of the subject wearing normal indoor apparel.

STATURE (CLOTHED): The distance from the floor to the top of the head measured with the subject wearing normal indoor apparel.

OVERHEAD REACH BREADTH: The maximum breadth across the arms or shoulders, whichever is wider, measured as the subject stands with his toes 15 centimeters from a wall, his arms extended overhead, fists touching each other and against the wall, and the first phalanges horizontal.

BENT TORSO HEIGHT: The distance from the floor to the top of the head measured as the subject stands, his feet 12 inches apart, the palms of his hands on his kneecaps, and his head as close to the Frankfort plane as possible.

BENT TORSO BREADTH: The maximum breadth of the shoulders measured as the subject stands, his feet 12 inches apart, the palms of his hands on his kneecaps, and his head as close to the Frankfort plane as possible.

KNEELING HEIGHT: The distance from the floor to the top of the head measured as the subject kneels with his toes extended and touching a wall, his torso erect, his arms hanging loosely, and his head in a Frankfort plane.

KNEELING LEG LENGTH: The distance measured as the subject kneels, his toes extended and touching a wall, and his torso erect from the wall to the anterior portion of the knee.

BENT KNEE HEIGHT: The height of the highest point on the knee when the subject lies supine, his knees raised so that the angle between the upper and lower legs approximates 60 degrees and his toes touch a wall.

HORIZONTAL LENGTH, KNEES BENT: The distance from vertex to the tip of the toes when the subject lies supine, his knees raised so that the angle between the upper and lower legs approximates 60 degrees and his toes touch a wall.

TABLE 5

BASIC SUMMARY STATISTICS
THE WORK SPACE MEASUREMENTS

MEAN	STD DEV	-V- -N-	- - - THE PERCENTILES - - -										
			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
1W OVERHEAD REACH HEIGHT													
215.10	9.42	4.4%	200.4	203.5	205.7	208.8	211.5	215.1	218.8	221.6	225.1	227.4	230.5
84.69	3.71	106	78.9	80.1	81.0	82.2	83.3	84.7	86.1	87.2	88.6	89.5	90.8
2W FUNCTIONAL REACH													
79.75	4.12	5.2%	72.6	74.3	75.3	76.9	78.2	79.9	81.5	82.7	84.2	85.1	86.4
31.40	1.62	106	28.6	29.2	29.7	30.3	31.8	31.5	32.1	32.6	33.2	33.5	34.0
3W FUNCTIONAL REACH EXTENDED													
91.86	5.22	5.7%	84.2	85.5	86.5	88.0	89.4	91.4	93.6	95.4	97.6	99.1	101.2
36.17	2.06	106	33.2	33.7	34.0	34.7	35.2	36.0	36.9	37.6	38.4	39.0	39.8
4W OVERHEAD REACH, SITTING													
136.88	5.85	4.3%	127.9	130.4	131.8	133.5	134.9	136.7	138.0	140.3	142.6	144.3	146.9
53.89	2.30	106	50.3	51.3	51.9	52.6	53.1	53.8	54.6	55.2	56.1	56.8	57.9
5W FUNCTIONAL LEG LENGTH													
118.55	5.24	4.4%	110.6	111.4	112.2	114.8	116.6	118.6	120.6	122.0	123.8	125.6	127.7
46.67	2.06	106	43.5	43.9	44.2	45.2	45.9	46.7	47.2	48.0	48.7	49.5	50.3
6W WEIGHT (CLOTHED)													
159.10	21.83	13.7%	129.1	133.8	137.3	143.1	148.4	156.3	165.1	172.2	181.6	188.5	198.8
72.17	9.90	106	58.6	60.7	62.3	64.9	67.3	70.9	74.9	78.1	82.5	85.5	90.2
7W STATURE (CLOTHED)													
177.95	6.26	3.5%	168.5	170.6	171.9	173.3	175.5	177.6	180.4	182.1	184.3	186.2	189.0
73.06	2.46	106	66.4	67.2	67.7	68.2	69.1	69.9	71.0	71.7	72.6	73.3	74.4
8W OVERHEAD REACH BREADTH													
38.50	2.05	5.3%	35.2	35.9	36.4	37.1	37.7	38.5	39.3	39.9	40.6	41.1	41.9
15.16	.81	106	13.9	14.1	14.3	14.6	14.8	15.2	15.5	15.7	16.0	16.2	16.5
9W BENT TORSO HEIGHT													
137.28	7.27	5.3%	125.6	127.7	129.3	131.8	134.0	137.1	140.3	142.7	145.6	147.4	149.8
54.05	2.86	106	49.4	50.3	50.9	51.9	52.8	54.0	55.2	56.2	57.3	58.1	59.0
10W BENT TORSO BREADTH													
44.72	2.25	5.0%	40.9	42.0	42.6	43.4	44.0	44.8	45.5	46.1	46.9	47.4	48.3
17.61	.88	106	16.1	16.5	16.8	17.1	17.3	17.6	17.9	18.2	18.5	18.7	19.0

TABLE 5

BASIC SUMMARY STATISTICS
THE WORK SPACE MEASUREMENTS

MEAN	STD DEV	-V- -N-	- - - THE PERCENTILES - - -										
			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
11W KNEELING HEIGHT													
129.19	4.56	3.5%	121.9	123.6	124.7	126.2	127.4	129.0	130.8	132.2	134.0	135.2	136.9
50.86	1.79	106	48.0	48.7	49.1	49.7	50.1	50.8	51.5	52.0	52.8	53.2	53.9
12W KNEELING LEG LENGTH													
69.36	3.64	5.3%	63.9	65.0	65.6	67.0	68.0	69.5	70.9	71.6	73.0	74.1	75.5
27.31	1.43	106	25.2	25.6	25.8	26.4	26.8	27.3	27.9	28.2	28.8	29.2	29.7
13W BENT KNEE HEIGHT, SUPINE													
49.06	2.69	5.5%	44.7	45.5	46.2	47.1	47.9	49.0	50.2	51.0	52.0	52.7	53.5
19.31	1.06	106	17.6	17.9	18.2	18.5	18.9	19.3	19.7	20.1	20.5	20.7	21.1
14W HORIZONTAL LENGTH, KNEES BENT													
161.20	6.71	4.2%	150.8	152.5	153.7	155.9	157.9	160.8	163.8	166.2	169.0	170.8	173.0
63.46	2.64	106	59.4	60.0	60.5	61.4	62.2	63.3	64.5	65.4	66.5	67.2	68.1
1C WEIGHT-NUDE													
153.24	21.67	14.1%	123.1	127.8	131.4	137.5	142.9	150.9	159.6	166.6	175.8	182.3	192.2
69.51	9.83	106	55.8	58.0	59.6	62.4	64.8	68.4	72.4	75.6	79.8	82.7	87.2
2C STATURE-NUDE													
174.09	6.44	3.7%	163.9	166.3	167.8	169.9	171.5	173.9	176.4	178.3	180.8	182.5	184.8
68.54	2.53	106	64.5	65.5	66.1	66.9	67.5	68.5	69.4	70.2	71.2	71.9	72.7

CHAPTER IV

SUBSERIES 3: THE HEAD AND FACE MEASUREMENTS

Thirty-four head and face measurements were made on a subsample of 102 men in addition to the three basic head measurements--head length, head breadth, and head circumference--which were made on the entire sample. Measurements and measurement techniques were the same for the men as for the women. The survey blank for this series (Figure 3) lists these 34 measurements.

The 102 men who constituted the subsample did not differ significantly from the total sample. The two groups were predominantly trainees and about 30 percent Black. The median age for each sample was close to 19 years. A comparison of the subsample and the full sample with respect to the basic head measurements is illustrated by the following figures:

	<u>Head and Face Subsample</u>	<u>Total Subsample</u>
Head Length	$\bar{X} = 19.48 \quad \sigma = 0.65 \quad (\text{cm})$	$\bar{X} = 19.47 \quad \sigma = 0.70 \quad (\text{cm})$
Head Breadth	$\bar{X} = 14.97 \quad \sigma = 0.49 \quad (\text{cm})$	$\bar{X} = 15.06 \quad \sigma = 0.54 \quad (\text{cm})$
Head Circumference	$\bar{X} = 55.88 \quad \sigma = 1.55 \quad (\text{cm})$	$\bar{X} = 56.01 \quad \sigma = 1.63 \quad (\text{cm})$

Half (16 out of 34) of the subseries measurements were made with the headboard illustrated in Figure 4. These provide vertical and horizontal coordinates relative to the top and the back of the head for five points in the profile: menton, subnasale, pronasale, sellion (the deepest point in the nasal root depression), and glabella (a point on the forehead between the brow ridges) and for two non-profile points: ectocanthus (the outer corner of the eye) and tragion (the cartilaginous notch just forward of the ear hole). The two other headboard measurements were the vertical distance to the point of contact of the lips in the profile plane (stomion) and the horizontal distance to the most posterior point in the profile plane of either lip.

Ten measurements were distances between points in the profile plane--crinion-menton, sellion-menton, sellion-subnasale--or breadths across the face--biocular, interpupillary, mouth, nose, face, bitragion, and minimum frontal. Four measurements were arc lengths measured from right tragion to left tragion with a tape which passed variously over the top of the head, across the forehead, under the chin, and under the jaw. A fifth arc length was measured across the head from front to back (glabella to nuchale). The remaining three measurements which had not been taken on most of the women were ear length, ear breadth and biauricular breadth.

ARMY CORPS ANTHROPOMETRIC SURVEY BLANK - 1976/1977

(Please print all requested information)

Subject No. _____ Social Security No. _____
 Name _____ Location _____
 (Last) (First) (Middle)

Sub-Series #3

Head and Face

(Headboard)					
1. Menton to Wall					17. Crinion-Menton
2. Stomion to Wall					18. Sellion-Menton
3. Subnasale to Wall					19. Sellion-Subnasale
4. Pronasale to Wall					20. Biocular Breadth
5. Sellion to Wall					21. Interpupillary Distance
6. Glabella to Wall					22. Mouth Breadth, Smiling
7. Ectocanthus to Wall					23. Nose Breadth
8. Tragion to Wall					24. Face Breadth
					25. Bitragion Breadth
9. Menton to Vertex					26. Minimum-Frontal Br
10. Stomion to Vertex					27. Sagittal Arc
11. Subnasale to Vertex					28. Bitragion-Coronal Arc
12. Pronasale to Vertex					29. Bitragion-Frontal Arc
13. Sellion to Vertex					30. Bitragion-Menton Arc
14. Glabella to Vertex					31. Bitragion-Submandibular Arc
15. Ectocanthus to Vertex					
16. Tragion to Vertex					32. Ear length
					33. Ear breadth
					34. Biauricular breadth

Figure 3. The survey blank: head and face subseries.



Figure 4. Headboard.

Definitions of the measurements appear in the following pages. Statistical summaries for the 34 measurements in this subseries and for the three basic head measurements (as measured on the subsample) appear in Table 6. In Table 6, the mean, the standard deviation, and the percentile values for each measurement are shown in centimeters in the upper line and in inches in the lower line.

Additional statistics are included in Appendix A, frequency tables in Appendix B, and XVAL computer printouts in Appendix C. Illustrations of these measurements have been provided in both the first and second reports of this series and thus are not repeated here.

DEFINITIONS FOR THE HEAD AND FACE MEASUREMENTS

SAGITTAL ARC: The distance over the top of the head from glabella (the most anterior point between the brow ridges) to nuchale (the lowest point palpable at the base of the occiput) measured with the tape as close to the scalp as possible.

BITRAGION-CORONAL ARC: The distance from right tracion (the notch just forward of the ear hole) to left tracion, measured across the top of the head.

BITRAGION-FRONTAL ARC: The distance from right tracion (the notch just forward of the ear hole) to left tracion, measured across the forehead.

BITRAGION-MENTON ARC: The distance from right tracion (the notch just forward of the ear hole) to left tracion, measured with the tape passing under the tip of the chin.

BITRAGION-SUBMANDIBULAR ARC: The distance from right tracion (the notch just forward of the ear hole) to left tracion, measured with the tape passing under the gonial angles of the jaw and over the jaw-neck juncture.

GLABELLA TO WALL: The distance from the most anterior point between the brow ridges to the coronal plane tangent to the back of the head.

SELLION TO WALL: The distance from the deepest point in the nasal root depression to the coronal plane tangent to the back of the head.

PRONASALE TO WALL: The distance from the tip of the nose to the coronal plane tangent to the back of the head.

SUBNASALE TO WALL: The distance from the base of the nasal septum to the coronal plane tangent to the back of the head.

LIP PROTRUSION TO WALL: The distance from the most anterior point of the lips to the coronal plane tangent to the back of the head.

MENTON TO WALL: The distance from the tip of the chin to the coronal plane tangent to the back of the head.

ECTOCANTHUS TO WALL: The distance from the outer corner of the eye to the coronal plane tangent to the back of the head.

TRAGION TO WALL: The distance from the cartilaginous notch just forward of the ear hole to the coronal plane tangent to the back of the head.

BITRAGION BREADTH: The breadth of the head between the notches just forward of the ear holes.

HEAD HEIGHT (TRAGION-VERTEX): The distance from the cartilaginous notch just forward of the ear hole to the level of the top of the head.

ECTOCANTHUS TO VERTEX: The distance from the outer corner of the eye to the level of the top of the head.

GLABELLA TO VERTEX: The distance from the most anterior point between the brow ridges to the top of the head.

SELLION TO VERTEX: The distance from the deepest point in the nasal root depression to the top of the head.

PRONASALE TO VERTEX: The distance from the tip of the nose to the top of the head.

SUBNASALE TO VERTEX: The distance from the base of the nasal septum to the level of the top of the head.

STOMION TO VERTEX: The distance from the point of contact of the lips in the midsagittal plane to the top of the head.

MENTON TO VERTEX: The distance from the tip of the chin to the level of the top of the head.

FACE LENGTH (SELLION-MENTON): The vertical distance from the deepest point in the nasal root depression to the tip of the chin.

CRINION-MENTON: The vertical distance from the tip of the chin to the midsagittal point of the hairline.

MINIMUM FRONTAL BREADTH: The breadth of the forehead between the greatest indentations of the temporal crests above the brow ridges.

FACE BREADTH (BIZYGOMATIC): The breadth of the face across the zygomatic arches.

BIOCULAR BREADTH: The distance between the outer corners of the eyes.

INTERPUPILLARY DISTANCE: The distance between the centers of the pupils.

NOSE LENGTH (SELLION-SUBNASALE): The distance from the lowest point in the nasal root depression to the base of the nasal septum.

NOSE BREADTH: The maximum breadth of the nose.

MOUTH BREADTH, SMILING: The distance between the corners of the mouth, measured while the subject smiles broadly.

EAR LENGTH: The maximum length of the ear along its major axis.

EAR BREADTH: The maximum breadth of the ear in a plane perpendicular to its major axis.

BIAURICULAR BREADTH: The distance from the most lateral point of the right ear to the corresponding point of the left ear.

TABLE 6
BASIC SUMMARY STATISTICS
THE HEAD AND FACE MEASUREMENTS

	STO MEAN	-V- DEV	-N-	5TH	10TH	15TH	- - - THE PERCENTILES - - -					85TH	90TH	95TH
							25TH	35TH	50TH	65TH	75TH			
1M	SAGITTAL ARC													
34.80	1.50	4.3%	32.7	33.2	33.5	33.9	34.2	34.7	35.2	35.7	36.4	36.8	37.5	
13.70	.59	102	12.9	13.1	13.2	13.3	13.5	13.7	13.9	14.1	14.3	14.5	14.8	
2M	BITRAGION-CORONAL ARC													
34.12	1.26	3.7%	31.9	32.4	32.7	33.2	33.6	34.2	34.7	35.1	35.5	35.7	36.1	
13.43	.50	102	12.6	12.8	12.9	13.1	13.2	13.5	13.7	13.8	14.0	14.1	14.2	
3M	BITRAGION-FRONTAL ARC													
29.31	1.07	3.7%	27.6	28.0	28.2	28.6	28.9	29.3	29.7	30.1	30.5	30.7	31.1	
11.54	.42	102	10.9	11.0	11.1	11.3	11.4	11.5	11.7	11.8	12.0	12.1	12.3	
4M	BITRAGION-MENTON ARC													
31.10	1.30	4.2%	29.0	29.4	29.6	30.1	30.5	31.1	31.7	32.2	32.5	32.7	33.1	
12.24	.51	102	11.4	11.6	11.7	11.9	12.0	12.2	12.5	12.7	12.8	12.9	13.0	
5M	BITRAGION-SUBMANDIBULAR ARC													
28.63	1.28	4.5%	26.7	26.9	27.2	27.5	28.1	28.7	29.2	29.8	30.1	30.4	30.7	
11.27	.51	102	10.5	10.6	10.7	10.8	11.1	11.3	11.5	11.7	11.9	12.0	12.1	
6M	GLABELLA TO WALL													
19.61	.71	3.7%	18.5	18.8	18.9	19.1	19.3	19.6	19.8	20.0	20.3	20.5	20.8	
7.72	.28	102	7.3	7.4	7.5	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.2	
7M	SELLION TO WALL													
19.49	.70	3.6%	18.4	18.6	18.8	19.1	19.2	19.5	19.7	19.9	20.1	20.3	20.7	
7.67	.28	102	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.8	7.9	8.0	8.1	
8M	PRONASALE TO WALL													
22.20	.75	3.4%	21.0	21.2	21.4	21.7	21.9	22.2	22.5	22.7	23.0	23.2	23.4	
8.74	.29	102	8.3	8.4	8.4	8.5	8.6	8.7	8.9	8.9	9.1	9.1	9.2	
9M	SUBNASALE TO WALL													
20.87	.78	3.8%	19.6	19.9	20.1	20.3	20.6	20.9	21.1	21.3	21.6	21.8	22.2	
8.22	.31	102	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	
10M	LIP PROTRUSION TO WALL													
20.91	1.00	4.8%	19.4	19.7	19.9	20.2	20.5	20.8	21.2	21.5	22.0	22.3	22.8	
8.23	.39	102	7.7	7.8	7.8	8.0	8.1	8.2	8.4	8.5	8.6	8.8	9.0	

TABLE 6

BASIC SUMMARY STATISTICS
THE HEAD AND FACE MEASUREMENTS

MEAN	STD	-V-	- - - THE PERCENTILES - - -										
	DEV	-N-	5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
11H MENTON TO WALL													
20.22	1.11	5.5%	18.6	18.9	19.1	19.4	19.7	20.1	20.6	20.9	21.4	21.7	22.2
7.96	.44	102	7.3	7.4	7.5	7.6	7.8	7.9	8.1	8.2	8.4	8.5	8.7
12H ECTOCANTHUS TO WALL													
17.50	.75	4.3%	16.3	16.5	16.7	17.0	17.2	17.5	17.8	18.0	18.2	18.4	18.7
6.89	.29	102	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4
13H TRAGION TO WALL													
10.32	.71	6.9%	9.2	9.4	9.6	9.9	10.0	10.3	10.6	10.8	11.1	11.3	11.5
4.06	.28	102	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.4	4.5
14H BITRAGION BREADTH													
13.50	.59	4.4%	12.5	12.7	12.9	13.1	13.3	13.5	13.8	13.9	14.1	14.3	14.5
5.32	.23	102	4.9	5.0	5.1	5.2	5.2	5.3	5.4	5.5	5.6	5.6	5.7
15H HEAD HEIGHT (TRAGION-VERTEX)													
13.39	.68	5.1%	12.3	12.5	12.7	13.0	13.2	13.4	13.6	13.8	14.0	14.2	14.4
5.27	.27	102	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.4	5.5	5.6	5.7
16H ECTOCANTHUS TO VERTEX													
11.04	.79	7.2%	9.8	10.1	10.2	10.5	10.7	11.0	11.3	11.6	11.9	12.1	12.4
4.35	.31	102	3.9	4.0	4.0	4.1	4.2	4.3	4.5	4.6	4.7	4.8	4.9
17H GLABELLA TO VERTEX													
7.90	.86	10.8%	6.5	6.8	6.9	7.3	7.5	7.9	8.3	8.6	8.9	9.0	9.4
3.11	.34	102	2.6	2.7	2.7	2.9	3.0	3.1	3.3	3.4	3.5	3.6	3.7
18H SELLION TO VERTEX													
9.66	1.00	10.3%	8.2	8.3	8.5	8.8	9.2	9.7	10.0	10.3	10.8	11.0	11.3
3.80	.39	102	3.2	3.3	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.3	4.5
19H PRONASALE TO VERTEX													
13.14	1.07	8.1%	11.6	11.8	12.0	12.3	12.6	13.0	13.5	13.9	14.3	14.6	15.1
5.17	.42	102	4.6	4.7	4.7	4.9	5.0	5.1	5.3	5.5	5.6	5.8	5.9
20H SUBNASALE TO VERTEX													
14.49	.95	6.6%	13.0	13.3	13.5	13.8	14.1	14.4	14.8	15.2	15.6	15.8	16.2
5.70	.38	102	5.1	5.2	5.3	5.4	5.5	5.7	5.8	6.0	6.1	6.2	6.4

TABLE 6

BASIC SUMMARY STATISTICS
THE HEAD AND FACE MEASUREMENTS

MEAN	STD DEV	-V- -N-	- - - THE PERCENTILES - - -										
			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
21H STOMION TO VERTEX													
16.86	1.00	5.9%	15.4	15.7	15.8	16.1	16.4	16.8	17.2	17.5	18.0	18.3	18.7
6.64	.39	102	6.1	6.2	6.2	6.4	6.5	6.6	6.8	6.9	7.1	7.2	7.4
22H MENTON TO VERTEX													
21.34	1.00	4.7%	19.9	20.2	20.4	20.6	20.9	21.2	21.6	22.0	22.4	22.7	23.2
8.40	.39	102	7.8	7.9	8.0	8.1	8.2	8.4	8.5	8.7	8.8	8.9	9.1
23H FACE LENGTH (SELLION-MENTON)													
11.70	.68	5.8%	10.6	10.8	11.0	11.2	11.4	11.7	12.0	12.2	12.5	12.6	12.8
4.61	.27	102	4.2	4.3	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1
24H CRINION-MENTON													
18.52	.85	4.6%	17.1	17.4	17.6	18.0	18.2	18.6	18.9	19.1	19.4	19.6	19.9
7.29	.33	102	6.7	6.9	6.9	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8
25H MINIMUM FRONTAL BREADTH													
11.13	.80	7.2%	9.9	10.1	10.2	10.5	10.8	11.2	11.5	11.8	12.1	12.2	12.4
4.38	.32	102	3.9	4.0	4.0	4.1	4.2	4.4	4.5	4.6	4.8	4.8	4.9
26H FACE BREADTH (BIZYGOMATIC)													
13.75	.52	3.8%	12.8	13.0	13.2	13.4	13.6	13.8	14.0	14.2	14.3	14.4	14.5
5.42	.21	102	5.0	5.1	5.2	5.3	5.4	5.4	5.5	5.6	5.6	5.7	5.7
27H BIOGULAR BREADTH													
10.12	.49	4.9%	9.3	9.5	9.6	9.8	10.0	10.1	10.3	10.5	10.6	10.7	10.9
3.98	.19	102	3.7	3.7	3.8	3.9	3.9	4.0	4.1	4.1	4.2	4.2	4.3
28H INTERPUILLARY DISTANCE													
5.89	.48	8.2%	5.1	5.3	5.4	5.6	5.7	5.9	6.1	6.2	6.4	6.5	6.7
2.32	.19	102	2.0	2.1	2.1	2.2	2.3	2.3	2.4	2.4	2.5	2.6	2.6
29H NOSE LENGTH (SELLION-SUBNASALE)													
4.97	.36	7.2%	4.4	4.5	4.6	4.7	4.8	4.9	5.1	5.2	5.4	5.5	5.6
1.96	.14	102	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.1	2.1	2.2	2.2
30H NOSE BREADTH													
3.72	.47	12.8%	3.0	3.1	3.2	3.4	3.5	3.7	3.9	4.1	4.3	4.4	4.6
1.46	.19	102	1.2	1.2	1.3	1.3	1.4	1.4	1.5	1.6	1.7	1.7	1.8

TABLE 6
BASIC SUMMARY STATISTICS
THE HEAD AND FACE MEASUREMENTS

MEAN	STD DEV	-V- -N-	- - - THE PERCENTILES - - -										
			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
31H MOUTH BREADTH, SMILING													
6.47	.72	11.1%	5.4	5.5	5.7	5.9	6.1	6.4	6.8	7.0	7.3	7.5	7.7
2.55	.28	102	2.1	2.2	2.2	2.3	2.4	2.5	2.7	2.8	2.9	2.9	3.1
32H EAR LENGTH													
6.22	.44	7.1%	5.5	5.7	5.8	6.0	6.1	6.2	6.4	6.5	6.7	6.8	6.9
2.45	.17	102	2.2	2.2	2.3	2.3	2.4	2.5	2.5	2.6	2.6	2.7	2.7
33H EAR BREADTH													
4.34	.36	8.4%	3.8	3.9	4.0	4.1	4.2	4.3	4.5	4.6	4.7	4.8	5.0
1.71	.14	102	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	1.9	2.0
34H BIAURICULAR BREADTH													
17.87	.87	4.9%	16.5	16.8	17.0	17.3	17.5	17.8	18.2	18.4	18.6	19.0	19.4
7.64	.34	102	6.5	6.6	6.7	6.8	6.9	7.0	7.2	7.3	7.4	7.5	7.6
54C HEAD CIRCUMFERENCE													
55.67	1.55	2.8%	53.4	53.9	54.3	54.8	55.3	55.8	56.4	56.9	57.5	57.9	58.4
22.50	.61	102	21.0	21.2	21.4	21.6	21.8	22.0	22.2	22.4	22.6	22.8	23.0
55C HEAD BREADTH													
14.97	.49	3.3%	14.1	14.2	14.4	14.7	14.8	15.0	15.2	15.3	15.5	15.6	15.7
5.90	.19	102	5.6	5.6	5.7	5.8	5.8	5.9	6.0	6.0	6.1	6.2	6.2
56C HEAD LENGTH													
19.48	.65	3.4%	18.5	18.7	18.9	19.1	19.2	19.4	19.7	19.9	20.2	20.3	20.6
7.67	.26	102	7.3	7.4	7.4	7.5	7.6	7.7	7.8	7.8	7.9	8.0	8.1

Chapter V

SUBSERIES 4: STATIC STRENGTH MEASUREMENTS

A sample of 102 men served as subjects for a series of static strength measurements made with a University of Michigan strength monitor (Figure 5). Nine sets of measurements, listed on the survey blank shown in Figure 6, were made twice on each subject, yielding both mean and peak strength values. Four of the measurements were two-handed exertions, the subject standing and the handle being located at 38 centimeters, 50 centimeters, 100 centimeters, and 150 centimeters above the floor. Two additional two-handed measurements were made with the subject seated and the handle at 38 centimeters or 50 centimeters above the floor. All six of these measurements were made with the rope in the midsagittal plane. The other three measurements were one-handed pulls--the subject used whichever arm he reported as being his dominant one. One was a pull with the subject standing, with the D-ring 100 centimeters above the floor and on the subject's side. The remaining two were both made with the subject seated and the D-ring 45 centimeters above the floor, one with the grip at the subject's side and the other with it in the midsagittal plane.

The subjects were generally run in pairs or, occasionally, three's. When this was done, at each position both (or all three) made their first efforts after which, in the same subject sequence, they made their second efforts. This procedure provided a reasonable time for the subject to relax between efforts without adding to the total time needed for each subject. The measurements were not, as a rule, made in the sequence shown on the survey blank. Rather, at the completion of each subject's or group of subjects' measurements, the handle or D-ring was not changed and the next subject began with the arrangement with which the last subject finished. In addition to saving some time and effort, this procedure can be assumed to have spread out over the series of measurements much of the effects of novelty and weariness.

The mean values were obtained by integrating the measured exertion over a three-second period starting two seconds after the monitor sensed a force of 10 pounds (4.5 kilograms). The peak values for each subject were the maximum forces noted during each of the two periods in which a force was being exerted.

In reporting the strength data, the conventional units of kilograms and pounds have been used. However, in accordance with the International System of Units, generally known as SI, the correct unit for reporting kilograms or pounds of force is the newton. The kilogram-force values reported here may be converted to newtons by multiplying by 9.806, while the pound-force values may be converted to newtons by multiplying by 4.448.

Definitions of the strength measurements appear on the following pages. Statistics for these measurements are given in Table 7, with frequency tables in Appendix B, and XVAL printouts in Appendix C.

Fifteen of the subjects were left-handed. One subject reported he was ambidextrous; he was tested using his right arm for the single arm exertions. The subsample for this series was, as were the other subsamples, mainly trainees with a median age of approximately 19 years. Thirty-two (31%) were Blacks, 67 (66%) Whites, and 3 (3%) Orientals.

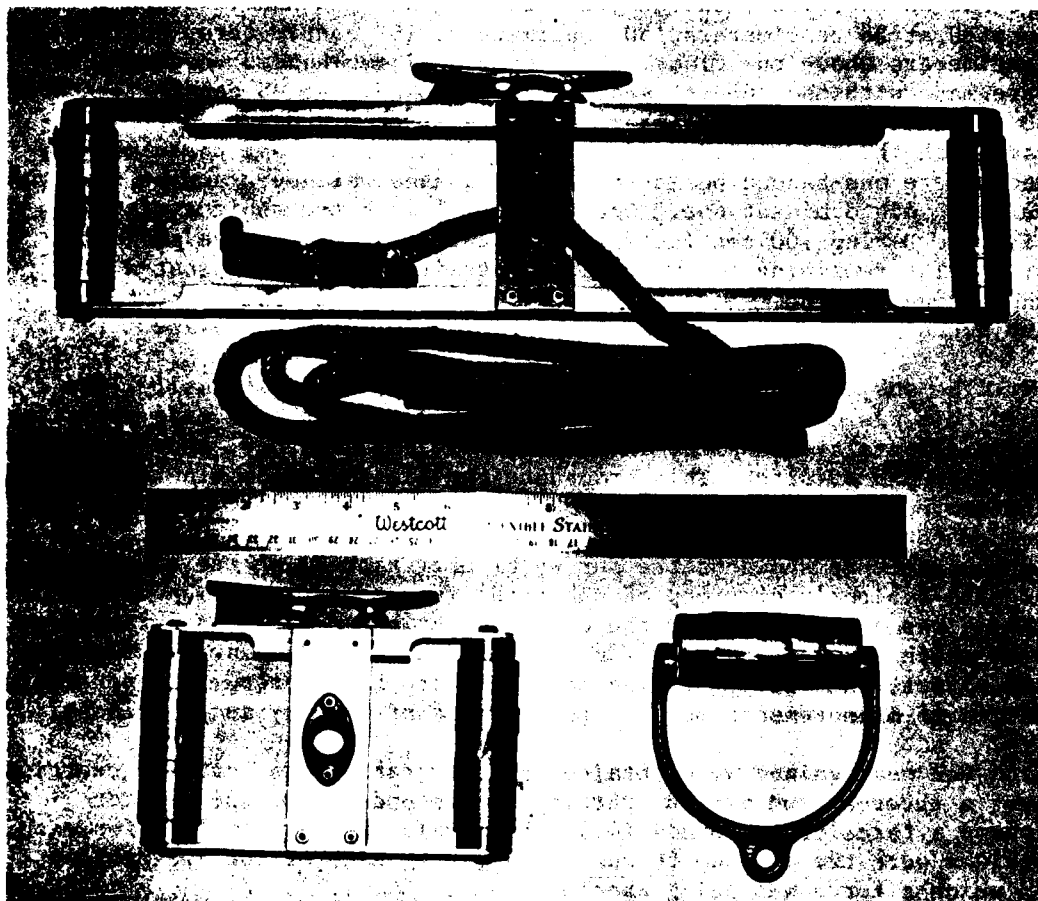


Figure 5. Strength-measuring handles.

ARMY CORPS ANTHROPOMETRIC SURVEY BLANK - 1976/1977

(Please print all requested information)

Subject No. _____ Social Security No. _____
 Name _____ Location _____
 (Last) (First) (Middle)
 Handedness R L A
 (circle appropriate symbol)

Sub-Series #4

Static Muscle Strength (lbs of force)

		T ₁	T ₂																
1. Standing Two-Handed Lift 38 cm Above Floor Long Handle (Bent Knee)	Average Peak	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
2. Standing Two-Handed Lift 50 cm Above Floor Long Handle (Straight Knee)	Average Peak	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
3. Standing Two-Handed Lift 100 cm Above Floor Long Handle	Average Peak	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
4. Standing Two-Handed Lift 150 cm Above Floor Long Handle	Average Peak	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
5. Standing One-Handed Lift 100 cm Above Floor "D" Ring	Average Peak	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
6. Seated One-Handed Pull Centerline of Seat 45 cm Above Floor "D" Ring	Average Peak	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								

Figure 6a. The survey blank: static muscle strength subseries.

		T ₁	T ₂																
7. Seated One-Handed Pull Side of Seat (Dominant Hand) 45 cm Above Floor "D" Ring	Average	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
	Peak	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
8. Seated Two-Handed Pull Centerline of Seat 38 cm Above Floor Short Handle	Average	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
	Peak	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
9. Seated Two-Handed Pull Centerline of Seat 50 cm Above Floor Short Handle	Average	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
	Peak	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
10.	Average	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
	Peak	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
11.	Average	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
	Peak	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
12.	Average	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
	Peak	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
13.	Average	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
	Peak	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
14.	Average	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
	Peak	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
15.	Average	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
	Peak	<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>									<table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								

Figure 6b. The survey blank: static muscle strength subseries.

DEFINITIONS OF THE STRENGTH MEASUREMENTS

STANDING TWO-HANDED PULL--38-CENTIMETER LEVEL: The subject stands with his feet 45 centimeters apart and his knees bent. He bends at the waist and grasps both sides of the long handle which is attached 38 centimeters above the platform and directly in front of him. He is instructed to minimize pull with his back to lessen the chance of injury. He attempts to lift the handle, primarily using his arms and shoulders but also using his legs by extending them upwards.

STANDING TWO-HANDED PULL--50-CENTIMETER LEVEL: The subject stands with his feet 45 centimeters apart and his knees straight. He bends at the waist and grasps both sides of the long handle which is attached 50 centimeters above the platform and directly in front of him. He is instructed to minimize pull with his back to lessen the chance of injury. He attempts to lift the handle, primarily using the arms and shoulders.

STANDING TWO-HANDED PULL--100-CENTIMETER LEVEL: The subject stands erect with his feet 45 centimeters apart and grasps both sides of the long handle which is attached 100 centimeters above the platform and directly in front of him. He attempts to lift the handle using his arms, while keeping his knees straight and his feet firmly planted on the platform.

STANDING TWO-HANDED PUSH--150-CENTIMETER LEVEL: The subject stands erect with his feet 45 centimeters apart and grasps, from below, both sides of the long handle which is attached 150 centimeters above the platform and directly in front of him. He attempts to push the handle straight upward using his arms and shoulders, while keeping his knees straight and his feet firmly planted on the platform.

STANDING ONE-HANDED PULL--100-CENTIMETER LEVEL (D-RING): The subject stands erect with his feet 15 centimeters apart. With his dominant hand (right, if he has reported that he is ambidextrous), he grasps, from the underside, the D-ring which is attached 100 centimeters above the platform and at a point just to the right (or left, as is appropriate) of his body. He attempts to lift the D-ring, primarily using his arm while keeping his shoulders square, his feet firmly planted on the platform, and his other arm relaxed at his side.

SEATED ONE-HANDED PULL, CENTERLINE OF SEAT--45-CENTIMETER LEVEL (D-RING): The subject sits erect with his feet 55 centimeters apart. With his dominant hand, he grasps, from the underside, the D-ring which is attached 45 centimeters above the platform, just forward of the chair in its vertical midplane. He attempts to lift the D-ring, keeping his shoulders square, his feet firmly planted on the platform, and his other arm resting in his lap and not grasping the underside of the chair.

SEATED ONE-HANDED PULL, SIDE OF SEAT--45-CENTIMETER LEVEL (D-RING): The subject sits erect with his feet 55 centimeters apart. With his dominant hand, he grasps, from the underside, the D-ring which is attached 45 centimeters above the platform and a short distance to the right (or left, as is appropriate) of the point midway between the maximal protrusion of the buttock and knee. He attempts to lift the D-ring, keeping his shoulders square, his feet firmly planted on the platform, and his other arm resting in his lap.

SEATED TWO-HANDED PULL, CENTERLINE OF SEAT--38-CENTIMETER LEVEL (SHORT HANDLE): The subject sits erect with his feet 55 centimeters apart. He bends slightly at the waist and grasps both sides of the short handle which is attached 38 centimeters above the platform at a point just forward of the chair and in its vertical midplane. He attempts to lift the handle, primarily using his arms and shoulders while keeping his feet flat and his arms off his thighs.

SEATED TWO-HANDED PULL, CENTERLINE OF SEAT--50-CENTIMETER LEVEL (SHORT HANDLE): The subject sits erect with his feet 55 centimeters apart. He bends slightly at the waist and grasps both sides of the short handle which is attached 50 centimeters above the platform at a point just forward of the chair and in its vertical midplane. He attempts to lift the handle, primarily using his arms and shoulders while keeping his feet flat and his arms off his thighs.

TABLE 7a

STATIC STRENGTH MEASUREMENTS---STANDING TWO-HANDED PULL 38 CM ABOVE FLOOR

SUMMARY STATISTICS

		KG	LB	KG	LB		
MEAN FORCE	- 1	M= 102.7/226.5	SD= 20.6/ 45.4	V=20.1%	V-I= .2	V-II= 2.4	
MEAN FORCE	- 2	M= 103.9/229.0	SD= 19.1/ 42.0	V=18.3%	V-I= .4	V-II= 2.8	
PEAK FORCE	- 1	M= 111.2/245.2	SD= 20.8/ 45.9	V=18.7%	V-I= .2	V-II= 2.3	
PEAK FORCE	- 2	M= 113.9/251.0	SD= 18.1/ 40.0	V=15.9%	V-I= .3	V-II= 2.9	

PERCENTILES

KILOGRAMS

		5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	- 1	70.3	73.7	79.6	86.9	92.7	101.9	112.8	116.9	124.5	131.0	138.1
MEAN FORCE	- 2	75.2	80.2	83.9	89.6	95.0	102.5	110.4	116.7	124.5	129.8	137.4
PEAK FORCE	- 1	76.5	84.0	88.3	95.4	101.5	110.2	119.2	125.9	134.1	139.4	146.4
PEAK FORCE	- 2	86.1	91.5	95.3	101.0	105.9	112.7	120.1	125.8	133.4	138.6	140.6

POUNDS

		5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	- 1	154.9	162.5	175.5	191.6	204.3	224.0	248.6	257.7	274.4	288.8	304.5
MEAN FORCE	- 2	165.6	176.7	184.9	198.0	209.5	225.9	243.5	257.2	274.5	286.3	303.0
PEAK FORCE	- 1	173.0	185.2	194.7	210.3	223.9	243.0	262.7	277.6	295.6	307.2	322.8
PEAK FORCE	- 2	189.9	201.8	210.0	222.8	233.5	248.6	264.7	277.4	294.0	305.6	323.1

TABLE 7b

STATIC STRENGTH MEASUREMENTS--STANDING TWO-HANDED PULL 50 CM ABOVE FLOOR

SUMMARY STATISTICS

		KG	LB	KG	LB	KG	LB	
MEAN FORCE	- 1	M=	102.1/225.1	SD=	18.2/	40.1		V=17.8% V-I= .4 V-II= 2.8
MEAN FORCE	- 2	M=	103.2/227.4	SD=	18.1/	39.6		V=17.5% V-I= .6 V-II= 3.0
PEAK FORCE	- 1	M=	112.1/247.2	SD=	19.5/	43.1		V=17.4% V-I= .4 V-II= 2.8
PEAK FORCE	- 2	M=	112.7/248.6	SD=	18.7/	41.2		V=16.6% V-I= .5 V-II= 2.9

PERCENTILES

KILOGRAMS

		5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	- 1	74.5	79.2	82.7	88.5	93.5	100.7	106.3	114.3	122.0	127.2	134.9
MEAN FORCE	- 2	77.3	81.4	84.5	89.6	94.5	101.4	106.9	114.9	122.9	128.4	136.8
PEAK FORCE	- 1	82.3	87.9	91.6	97.5	102.7	110.3	116.5	125.0	133.4	139.0	147.0
PEAK FORCE	- 2	84.7	89.4	92.9	98.6	103.8	111.0	118.7	124.7	132.4	137.8	145.8

POUNDS

		5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	- 1	164.2	174.6	182.4	195.1	206.1	222.0	236.9	252.1	269.0	280.5	297.4
MEAN FORCE	- 2	170.4	179.4	186.3	197.5	208.3	223.5	240.1	253.4	270.9	283.1	301.6
PEAK FORCE	- 1	182.4	193.7	201.9	214.9	226.4	243.1	261.2	275.6	294.1	306.5	324.1
PEAK FORCE	- 2	186.6	197.0	204.9	217.7	228.9	244.8	261.7	274.9	292.0	303.8	321.5

TABLE 7c
 STATIC STRENGTH MEASUREMENTS--STANDING TWO-HANDED PULL 100 CM ABOVE FLOOR

SUMMARY STATISTICS

			KG	LB	KG	LB			
MEAN FORCE	-	1	M=	66.6/146.8	SD=	14.7/	32.4	V=	22.1%
MEAN FORCE	-	2	M=	66.0/145.4	SD=	15.0/	33.0	V=	22.7%
PEAK FORCE	-	1	M=	72.4/159.6	SD=	15.0/	33.1	V=	20.7%
PEAK FORCE	-	2	M=	72.4/159.5	SD=	15.9/	35.1	V=	22.0%
								V-I=	.6
								V-I=	.6
								V-I=	.5
								V-I=	.5

PERCENTILES

KILOGRAMS

			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	-	1	45.3	47.7	52.2	57.2	59.5	62.8	70.8	76.3	82.8	88.8	94.9
MEAN FORCE	-	2	43.6	47.7	50.6	55.1	59.0	64.4	70.4	75.1	81.5	86.0	93.1
PEAK FORCE	-	1	51.4	55.0	57.3	60.9	64.3	68.8	77.5	83.5	88.9	94.7	100.2
PEAK FORCE	-	2	48.3	52.5	55.6	60.5	64.8	70.6	77.3	82.5	89.1	93.8	100.8

POUNDS

			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	-	1	99.9	105.3	115.1	126.1	131.2	138.5	156.1	168.2	182.6	195.8	209.3
MEAN FORCE	-	2	96.1	105.1	111.5	121.5	130.0	142.1	155.2	165.6	179.6	189.6	205.2
PEAK FORCE	-	1	113.3	121.3	126.4	134.3	141.8	151.8	170.8	184.1	195.9	208.8	220.9
PEAK FORCE	-	2	106.4	115.7	122.5	133.4	142.8	156.2	170.5	181.8	196.5	206.7	222.2

TABLE 7d

STATIC STRENGTH MEASUREMENTS--STANDING TWO-HANDED PUSH 150 CM ABOVE FLOOR

SUMMARY STATISTICS

			KG	LB	KG	LB				
MEAN FORCE	-	1	M=	67.2/148.1	SD=	17.9/ 39.4	V=26.6%	V-I=	.5	V-II= 2.8
MEAN FORCE	-	2	M=	68.8/151.6	SD=	19.8/ 43.7	V=28.9%	V-I=	.9	V-II= 4.3
PEAK FORCE	-	1	M=	74.5/164.3	SD=	19.1/ 42.2	V=25.7%	V-I=	.8	V-II= 3.8
PEAK FORCE	-	2	M=	75.9/167.3	SD=	20.5/ 45.3	V=27.1%	V-I=	1.1	V-II= 5.3

PERCENTILES

KILOGRAMS

			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	-	1	41.7	45.4	48.3	53.3	58.0	65.0	72.9	79.1	87.1	92.4	99.8
MEAN FORCE	-	2	43.3	45.0	48.4	54.6	59.0	66.4	74.5	81.0	89.3	95.2	103.7
PEAK FORCE	-	1	48.0	52.0	55.2	60.4	65.1	72.2	80.6	86.4	94.6	100.3	108.4
PEAK FORCE	-	2	48.2	52.5	55.8	61.1	65.9	73.1	81.1	87.6	90.3	102.4	111.6

POUNDS

			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	-	1	91.9	100.1	106.5	117.6	127.8	143.3	160.6	174.4	192.1	203.8	219.9
MEAN FORCE	-	2	97.9	99.3	106.6	119.6	130.1	146.4	164.3	178.5	197.0	209.8	228.6
PEAK FORCE	-	1	105.7	114.7	121.6	133.1	143.5	159.1	176.5	190.4	208.6	221.1	239.1
PEAK FORCE	-	2	106.3	115.8	122.9	134.8	145.4	161.2	178.9	193.2	212.3	225.7	246.0

TABLE 7e

STATIC STRENGTH MEASUREMENTS--STANDING ONE-HANDED PULL 100 CM ABOVE FLOOR

SUMMARY STATISTICS

			KG	LB	KG	LB			
MEAN FORCE	-	1	M=	41.6/	91.7	SD=	13.1/	28.9	V=31.5% V-I= .7 V-II= 3.5
MEAN FORCE	-	2	M=	42.3/	93.3	SD=	12.8/	28.2	V=30.2% V-I= .3 V-II= 3.0
PEAK FORCE	-	1	M=	47.6/	104.9	SD=	14.9/	32.8	V=31.3% V-I= .8 V-II= 4.0
PEAK FORCE	-	2	M=	48.9/	107.7	SD=	14.4/	31.7	V=29.5% V-I= .5 V-II= 3.9

PERCENTILES

KILOGRAMS

			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	-	1	21.7	24.1	27.3	31.8	37.0	41.2	45.2	48.8	51.9	59.2	63.8
MEAN FORCE	-	2	21.9	25.7	28.6	33.1	36.9	41.9	47.0	50.7	55.5	58.8	64.0
PEAK FORCE	-	1	26.4	30.3	33.0	37.3	40.9	46.1	51.7	56.3	62.4	66.9	73.8
PEAK FORCE	-	2	26.2	30.6	34.0	39.1	43.2	48.6	53.9	57.8	63.0	66.7	72.8

POUNDS

			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	-	1	47.9	53.2	60.2	70.0	81.6	90.8	99.7	107.5	114.5	130.0	140.7
MEAN FORCE	-	2	48.3	56.0	62.9	73.6	81.3	92.4	103.5	111.8	122.2	129.6	141.1
PEAK FORCE	-	1	58.2	66.7	72.7	82.1	90.1	101.6	114.1	124.1	137.7	147.4	162.8
PEAK FORCE	-	2	57.8	67.5	74.9	86.1	95.2	107.1	118.0	127.5	138.0	147.0	160.5

TABLE 7f

STATIC STRENGTH MEASUREMENTS---SEATED ONE-HANDED PULL CENTERLINE OF SEAT
45 CM ABOVE FLOOR

SUMMARY STATISTICS

			KG	LB	KG	LB			
MEAN FORCE	-	1	M=	45.4/100.1	SD=	14.0/ 30.8	V=30.7%	V-I=	-0.1
MEAN FORCE	-	2	M=	47.6/104.9	SD=	14.2/ 31.4	V=29.9%	V-II=	-0.2
PEAK FORCE	-	1	M=	52.0/114.7	SD=	15.0/ 33.1	V=26.8%	V-I=	-0.2
PEAK FORCE	-	2	M=	53.2/117.3	SD=	15.2/ 33.4	V=26.5%	V-II=	-0.1

PERCENTILES

KILOGRAMS

			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	-	1	21.3	26.6	28.5	34.3	40.1	46.8	51.1	55.5	61.0	64.3	68.4
MEAN FORCE	-	2	23.2	28.3	28.9	35.6	42.8	48.3	54.5	59.9	63.6	65.2	69.2
PEAK FORCE	-	1	27.1	30.2	32.7	41.4	47.4	53.8	58.2	63.2	68.7	71.9	74.7
PEAK FORCE	-	2	27.9	31.3	33.6	41.7	48.7	54.3	59.3	65.4	69.6	72.6	77.3

POUNDS

			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	-	1	46.9	58.6	62.9	75.5	88.4	103.3	112.6	122.3	134.5	141.7	146.5
MEAN FORCE	-	2	51.1	58.0	63.7	78.5	94.5	106.5	120.2	132.1	143.3	143.6	152.5
PEAK FORCE	-	1	59.8	66.7	72.1	91.3	104.5	118.6	128.3	139.3	151.5	158.6	164.7
PEAK FORCE	-	2	61.4	69.0	74.1	92.6	107.3	119.8	130.7	144.3	153.5	160.0	170.5

TABLE 7g

STATIC STRENGTH MEASUREMENTS--SEATED ONE-HANDED PULL SIDE OF SEAT
45 CM ABOVE FLOOR

SUMMARY-STATISTICS

		KG	LB	KG	LB		
MEAN FORCE	- 1 M=	39.3/	86.7	SD=	11.9/	26.3	V=30.3% V-I= .3 V-II= 2.6
MEAN FORCE	- 2 M=	42.3/	93.2	SD=	11.4/	25.2	V=27.1% V-I= .3 V-II= 2.6
PEAK FORCE	- 1 M=	42.3/	93.9	SD=	13.1/	28.9	V=29.0% V-I= .2 V-II= 2.6
PEAK FORCE	- 2 M=	47.9/	105.6	SD=	12.2/	26.9	V=25.5% V-I= .3 V-II= 3.0

PERCENTILES

KILOGRAMS

	5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	- 1	20.4	22.8	25.3	29.2	32.7	39.9	43.2	46.9	55.3	57.7
MEAN FORCE	- 2	24.4	28.1	29.9	33.2	35.9	41.6	46.9	49.9	59.1	61.5
PEAK FORCE	- 1	24.4	26.7	29.6	34.1	39.2	45.9	50.4	54.5	61.9	66.5
PEAK FORCE	- 2	27.8	32.7	34.6	38.2	42.8	47.2	52.7	55.8	64.3	67.2

POUNDS

	5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	- 1	45.0	50.3	55.8	64.4	72.0	87.9	95.1	103.3	122.0	127.2
MEAN FORCE	- 2	53.9	62.0	66.0	73.3	79.0	91.8	103.5	110.1	121.5	135.7
PEAK FORCE	- 1	53.9	59.0	62.2	75.1	86.5	101.3	111.1	120.3	130.9	146.6
PEAK FORCE	- 2	61.3	72.1	76.2	84.1	94.3	104.2	116.2	123.1	136.9	148.1

TABLE 7h

STATIC STRENGTH MEASUREMENTS SEATED TWO-HANDED PULL CENTERLINE OF SEAT
38 CM ABOVE FLOOR

SUMMARY STATISTICS

			KG	LB	KG	LB			
MEAN FORCE	-	1	M=	89.7/197.8	SD=	20.1/	44.3	V=22.4%	V-I= .3
MEAN FORCE	-	2	M=	90.5/199.4	SD=	18.4/	40.0	V=20.4%	V-II= 3.1
PEAK FORCE	-	1	M=	98.2/216.5	SD=	20.3/	44.8	V=20.7%	V-I= .5
PEAK FORCE	-	2	M=	100.0/220.4	SD=	18.5/	40.8	V=18.5%	V-II= 3.1

PERCENTILES

KILOGRAMS

			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	-	1	59.3	64.9	68.9	75.2	80.6	88.3	96.5	103.0	111.2	116.7	124.5
MEAN FORCE	-	2	60.7	67.1	71.6	78.2	83.4	90.3	97.1	102.2	108.5	112.9	119.5
PEAK FORCE	-	1	68.0	74.1	78.0	83.9	88.9	96.0	104.0	110.5	119.2	125.5	135.0
PEAK FORCE	-	2	71.3	77.6	81.7	87.7	92.5	99.0	105.8	111.1	118.3	123.4	131.6

POUNDS

			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	-	1	130.8	143.2	151.9	165.8	177.6	194.0	212.8	227.0	245.1	257.2	274.5
MEAN FORCE	-	2	133.7	148.0	157.0	172.4	183.9	199.1	214.1	225.3	239.3	248.8	263.3
PEAK FORCE	-	1	149.9	163.3	172.0	185.0	195.9	211.7	229.2	243.5	262.8	276.6	297.7
PEAK FORCE	-	2	157.1	171.0	180.1	193.4	203.9	218.5	233.2	245.0	260.7	272.1	290.2

TABLE 71

STATIC STRENGTH MEASUREMENTS SEATED TWO-HANDED PULL CENTERLINE OF SEAT
50 CM ABOVE FLOOR

SUMMARY-STATISTICS

			KG	LB	KG	LB			
MEAN FORCE	-	1	M=	77.5/170.9	SD=	17.5/ 38.5	V=22.5%	V-I=	.5
MEAN FORCE	-	2	M=	77.8/171.5	SD=	16.1/ 35.0	V=20.7%	V-I=	.4
PEAK FORCE	-	1	M=	85.3/188.0	SD=	18.9/ 41.6	V=22.1%	V-I=	.7
PEAK FORCE	-	2	M=	87.1/191.9	SD=	18.2/ 40.2	V=20.9%	V-I=	.5
								V-II=	4.0
								V-II=	2.9
								V-II=	4.1
								V-II=	3.0

PERCENTILES

KILOGRAMS

			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	-	1	49.3	55.3	59.6	66.0	70.9	77.2	83.3	87.3	94.1	96.8	107.3
MEAN FORCE	-	2	53.5	58.1	61.2	66.1	70.3	76.4	83.1	88.5	95.5	100.3	107.3
PEAK FORCE	-	1	57.4	63.0	66.9	72.7	77.4	83.6	90.5	95.9	103.5	109.3	119.5
PEAK FORCE	-	2	60.7	65.2	68.4	73.5	78.1	84.9	92.5	98.7	107.3	112.7	121.2

POUNDS

			5TH	10TH	15TH	25TH	35TH	50TH	65TH	75TH	85TH	90TH	95TH
MEAN FORCE	-	1	108.7	122.0	131.5	145.4	156.3	170.2	183.5	193.7	207.4	217.9	236.5
MEAN FORCE	-	2	118.3	128.1	135.0	145.7	154.9	168.4	183.1	195.0	210.5	221.1	236.5
PEAK FORCE	-	1	126.6	138.8	147.4	160.3	170.7	184.8	199.5	211.4	228.1	241.0	263.5
PEAK FORCE	-	2	133.9	143.7	150.7	162.0	172.1	187.1	204.0	217.7	235.8	248.5	267.3

BIBLIOGRAPHY

Churchill, Edmund, Thomas Churchill, John T. McConville, and Robert M. White. 1977. Anthropometry of Women of the U. S. Army--1977, Report No. 2 - The Basic Univariate Statistics, Technical Report NATICK/TR-77/024, U. S. Army Natick Research and Development Command, Natick, Massachusetts.

Churchill, Thomas, Edmund Churchill, John T. McConville, and Robert M. White. 1977. Anthropometry of Women of the U. S. Army--1977, Report No. 3 - Bivariate Frequency Tables. Technical Report NATICK/TR-77/028, U. S. Army Natick Research and Development Command, Natick, Massachusetts.

Laubach, Lloyd L., John T. McConville, Edmund Churchill, and Robert M. White. 1977. Anthropometry of Women of the U. S. Army--1977, Report No. 1 - Methodology and Survey Plan. Technical Report NATICK/TR-77/021, U. S. Army Natick Research and Development Command, Natick, Massachusetts.

Preceding Page BLANK - NOT FILMED

APPENDIX A

ADDITIONAL SUMMARY STATISTICS

Listed in this appendix are standard errors of the means and standard deviations, measures of symmetry and kurtosis, as well as six additional percentiles for the core-subseries 1 measurements, the workspace subseries and the head and face subseries. Units of measurement are shown in centimeters, except for weight which is given in pounds.

A-1. ADDITIONAL SUMMARY STATISTICS FOR THE
CORE-SUBSERIES 1 MEASUREMENTS

	SE (M)	SE (SD)	SYMM ETRY	KJRT OSIS	30TH	40TH	45TH	55TH	60TH	70TH
10 WEIGHT	1.43	1.01	.01	2.94	140.2	146.3	148.8	154.1	157.2	160.7
20 STATURE	.40	.28	.00	3.24	170.8	172.5	173.3	174.9	175.7	177.4
40 AXILLA HEIGHT	.35	.25	-.00	3.25	128.4	129.9	130.6	132.0	132.7	134.2
21 SUPRASTERNAL HGT	.36	.25	-.01	3.37	139.7	141.3	142.0	143.5	144.2	145.8
50 CHEST HEIGHT	.33	.24	-.04	3.22	124.6	126.1	126.8	128.2	128.9	130.4
31 SUBSTERNAL HEIGHT	.32	.23	-.15	3.38	119.9	121.3	122.0	123.3	124.0	125.4
41 ELBOW (RADIAL) HT	.30	.21	-.03	3.28	106.9	108.2	108.8	110.0	110.6	111.9
51 KNUCKLE HEIGHT	.24	.17	.05	3.26	73.4	74.4	74.9	76.0	76.5	77.6
60 WAIST HEIGHT	.34	.24	.04	2.67	101.0	102.6	103.4	104.9	105.6	107.2
80 BUTTOCK HEIGHT	.30	.21	-.01	3.09	86.9	88.3	88.9	90.2	90.8	92.1
71 GLUTEAL FURROW HGT	.26	.18	.06	3.16	78.0	79.1	79.7	80.8	81.4	82.6
81 TIBIAL HEIGHT	.16	.12	-.14	3.18	47.0	47.7	48.0	48.7	49.0	49.7
91 ACROMION-RADIAL L	.11	.08	.01	3.05	32.8	33.2	33.5	33.9	34.2	34.7
101 RADIAL-STYLION LH	.09	.07	.03	3.25	26.0	26.4	26.6	27.0	27.2	27.6
110 SITTING HEIGHT	.21	.15	.05	3.34	87.5	88.4	88.9	89.7	90.2	91.1
120 EYE HEIGHT/SITTING	.20	.14	.01	3.23	75.7	76.5	76.9	77.7	78.1	79.0
130 SHOULDER-ELBOW LTH	.11	.08	.03	3.06	35.4	35.8	36.0	36.5	36.7	37.2
111 ELBOW-GRIP LENGTH	.12	.08	.00	3.44	34.0	34.5	34.7	35.2	35.4	35.9
140 ELBOW-FINGERTIP LH	.15	.10	-.05	3.33	40.6	41.1	41.4	41.8	42.3	43.0
150 KNEE HEIGHT/SIT	.18	.13	-.04	3.06	53.6	54.4	54.7	55.4	55.8	56.6
160 POPLITEAL HEIGHT	.16	.11	-.06	3.02	42.9	43.6	44.0	44.6	45.0	45.7
170 BUTTOCK-KNEE LGTH	.18	.13	.03	3.01	59.1	60.0	60.4	61.1	61.5	62.4
180 CHEST DEPTH	.12	.08	.03	2.84	20.4	20.9	21.1	21.6	21.9	22.6
190 WAIST DEPTH	.13	.10	.08	4.04	18.9	19.3	19.6	20.1	20.4	21.2
151 BIACROMIAL BREADTH	.12	.08	-.13	2.82	38.5	39.0	39.3	39.8	40.0	40.6
250 SHOULDER CIRCUMFER	.30	.20	.29	2.86	107.3	109.0	109.8	111.4	112.2	114.0
270 CHEST CIRC	.39	.28	.56	2.83	88.7	90.3	91.0	92.6	93.7	95.8
290 WAIST CIRCUMFERENCE	.47	.34	1.06	3.97	73.6	75.2	76.0	77.9	78.9	81.4
191 WAIST C, OMPHALION	.49	.35	1.11	4.08	74.1	75.4	76.0	77.3	78.7	81.0
300 HIP CIRCUMFERENCE	.30	.25	.77	3.10	91.2	92.6	93.3	94.9	95.7	97.7
231 BICEPS CIRC, RELAXED	.16	.12	.24	2.75	27.6	28.3	28.7	29.4	29.8	30.6
330 BICEPS CIRC, FLEXED	.16	.11	.13	2.65	29.8	30.6	30.9	31.6	32.0	32.8
390 CALF CIRCUMFERENCE	.17	.12	.28	2.93	34.2	34.9	35.3	36.0	36.3	37.2
400 ANKLE CIRCUMFERENCE	.08	.06	.12	2.76	21.0	21.4	21.6	21.9	22.1	22.5
420 INTERSCYE, BACK	.17	.12	.02	2.82	39.5	40.3	40.6	41.3	41.7	42.5
430 INTERSCYE, FRONT	.12	.08	.10	2.71	35.6	36.1	36.4	36.9	37.1	37.7
440 BACK CURV'URE-CHST	.20	.14	.59	2.81	43.0	43.8	44.2	45.1	45.6	46.7
450 BACK CURV'URE-WAIST	.25	.18	1.18	4.95	36.5	37.3	37.7	38.6	39.1	40.3
460 BACK CURVATURE-HIP	.18	.13	.71	3.26	44.0	45.3	45.7	46.5	46.9	47.9
470 WAIST BACK LENGTH	.19	.13	.07	2.05	43.1	44.0	44.4	45.3	45.7	46.6

UNITS ARE CENTIMETERS OR POUNDS

ADDITIONAL SUMMARY STATISTICS
THE CORE-SUBSERIES 1 MEASUREMENTS

	SE (M)	SE (SD)	SYMM ETRY	KURT OSIS	50TH	- - - PERCENTILES - - -					
						40TH	45TH	55TH	60TH	70TH	
46C WAIST FRONT LENGTH	.18	.13	.00	2.91	39.4	40.2	40.6	41.4	41.6	42.6	
51C SLEEVE INSEAM LGTH	.16	.11	.03	3.31	46.8	47.5	47.8	48.5	48.9	49.6	
52C SLEEVE OUTSEAM LTH	.19	.13	.04	3.16	57.0	57.8	58.2	59.0	59.4	60.4	
54C HEAD CIRCUMFERENCE	.10	.07	-.15	3.01	55.2	55.6	55.9	56.3	56.5	56.9	
55C HEAD BREADTH	.03	.02	.17	3.04	14.8	14.9	15.0	15.1	15.2	15.3	
56C HEAD LENGTH	.04	.03	-.14	3.03	19.1	19.3	19.4	19.6	19.6	19.8	
57C PALM LENGTH	.03	.02	-.10	2.86	10.5	10.6	10.7	10.8	10.9	11.1	
58C HAND BREADTH	.03	.02	.04	2.64	8.7	8.8	8.9	9.0	9.0	9.2	
59C HAND CIRCUMFERENCE	.06	.04	.08	2.96	20.6	20.8	21.0	21.2	21.3	21.6	
60C HAND LENGTH	.00	.04	-.13	2.76	18.5	18.8	18.9	19.1	19.3	19.6	
61C INSTEP LENGTH	.07	.05	.02	2.83	19.1	19.4	19.6	19.9	20.0	20.3	
62C FOOT LENGTH	.08	.06	-.16	2.80	26.1	26.4	26.6	27.0	27.1	27.5	
63C HEEL-ANKLE CIRCUMF	.10	.07	.07	3.14	33.1	33.5	33.7	34.1	34.4	34.9	
64C FOOT BREADTH	.03	.02	-.12	3.31	9.6	9.8	9.8	10.0	10.0	10.2	
66C FOOT CIRCUMFERENCE	.08	.05	.10	2.88	24.4	24.8	24.9	25.2	25.4	25.8	
69C SPHYRION HEIGHT	.04	.03	-.03	2.97	7.1	7.2	7.3	7.5	7.6	7.7	
29T WAIST HT/OMPHALION	.31	.22	-.08	3.11	102.8	104.1	104.8	106.1	106.7	108.2	
30T MIDSHOULDER HT/SIT	.18	.13	.08	2.69	59.8	60.6	60.9	61.7	62.1	62.9	

A-2. ADDITIONAL SUMMARY STATISTICS
FOR THE WORKSPACE SUBSERIES

	SE (M)	SE (SD)	SYMM ETRY	KURT OSIS	- - - PERCENTILES - - -					
					30TH	40TH	45TH	50TH	60TH	70TH
1W OVERHEAD REACH HGT	.91	.65	-.09	3.16	210.2	212.7	213.9	216.3	217.5	220.1
2W FUNCTIONAL REACH	.40	.28	-.17	2.87	77.6	78.8	79.3	80.4	81.0	82.1
3W FUNCTIONAL RCH/EXT	.51	.36	.27	2.74	88.7	90.1	90.7	92.1	92.8	94.5
4W OVERHEAD REACH/SIT	.57	.40	-.04	3.82	134.2	135.5	136.1	137.3	137.9	139.4
5W FUNCTIONAL LEG LN	.51	.36	.11	2.65	115.7	117.2	117.7	119.4	120.6	121.4
6W WEIGHT (CLOTHED)	2.12	1.50	.59	3.17	145.8	151.0	153.6	159.1	162.0	168.5
7W STATURE (CLOTHED)	.61	.43	.06	3.26	174.9	176.3	177.0	178.2	179.1	181.4
8W OVERHEAD RCH BRDTH	.20	.14	.09	2.83	37.4	38.0	38.2	38.8	39.0	39.6
9W BENT TORSO HEIGHT	.71	.50	.06	2.37	132.9	135.0	136.1	136.1	139.2	141.5
10W BENT TORSO BREADTH	.22	.15	-.15	4.03	43.7	44.3	44.5	45.0	45.3	45.8
11W KNEELING HEIGHT	.44	.31	.02	2.97	126.8	127.9	128.5	129.0	130.2	131.5
12W KNEELING LEG LGTH	.35	.25	-.27	3.57	67.4	68.5	69.0	69.9	70.5	71.1
13W BENT KNEE HEIGHT	.25	.18	-.06	2.68	47.5	48.3	48.7	49.4	49.8	50.6
14W HORIZ L/KNEES BENT	.65	.46	.20	2.29	156.9	158.9	159.8	161.6	162.8	165.0
1C WEIGHT-NUDE	2.10	1.49	.50	3.17	140.3	145.5	148.2	153.6	156.5	162.9
2C STATURE-NUDE	.63	.44	.04	3.22	170.7	172.3	173.1	174.7	175.5	177.3

A-3. ADDITIONAL SUMMARY STATISTICS FOR THE
HEAD AND FACE SUBSERIES

	SE (M)	SE (SU)	SYMM ETRY	KURT OSIS	30TH	40TH	45TH	55TH	60TH	70TH
- - - PERCENTILES - - -										
1H SAGITTAL ARC	.15	.11	.12	3.74	34.0	34.4	34.5	34.9	35.0	35.5
2H BIT'ON-CORONAL ARC	.12	.09	-.14	2.62	33.4	33.8	34.0	34.3	34.5	34.9
3H BIT'ON-FRONTAL ARC	.11	.07	-.03	2.74	28.7	29.0	29.2	29.4	29.6	29.9
4H BITR'ON-MENTON ARC	.13	.09	-.02	2.39	30.4	30.8	31.0	31.4	31.5	32.0
5H BIT-SUBMANDBLR ARC	.13	.09	.04	2.20	27.7	28.3	28.5	28.9	29.0	29.3
6H GLABELLA TO WALL	.07	.05	.37	3.42	19.2	19.4	19.5	19.5	19.7	19.9
7H SELLION TO WALL	.07	.05	.32	3.75	19.2	19.3	19.4	19.5	19.6	19.8
8H PRONASALE TO WALL	.07	.05	.07	3.08	21.8	22.0	22.1	22.2	22.4	22.6
9H SUBNASALE TO WALL	.08	.05	.38	3.47	20.5	20.7	20.8	20.9	21.0	21.2
10H LIP PROTRUS'N-WALL	.10	.07	.51	3.29	20.3	20.6	20.7	21.0	21.1	21.4
11H MENTON TO WALL	.11	.08	.45	3.09	19.6	19.9	20.0	20.3	20.4	20.7
12H ECTOCANTHUS-WALL	.07	.05	.12	3.12	17.1	17.3	17.4	17.6	17.7	17.9
13H TRAGION TO WALL	.07	.05	-.05	3.09	10.0	10.1	10.2	10.4	10.5	10.7
14H BITRAGION BREADTH	.06	.04	-.04	2.63	13.2	13.4	13.5	13.5	13.7	13.8
15H HEAD HT/TRAGN-VRTX	.07	.05	.03	3.47	13.1	13.3	13.3	13.5	13.6	13.7
16H ECTOCANTHUS-VERTEX	.08	.06	.22	3.14	10.6	10.8	10.9	11.1	11.2	11.4
17H GLABELLA TO VERTEX	.09	.06	.06	2.30	7.4	7.5	7.6	8.0	8.1	8.4
18H SELLION TO VERTEX	.10	.07	.24	2.55	9.0	9.3	9.6	9.9	9.9	10.1
19H PRONASALE TO VERTX	.11	.07	.43	2.85	12.5	12.8	12.9	13.2	13.3	13.7
20H SUBNASALE TO VERTX	.09	.07	.22	2.74	13.9	14.2	14.3	14.6	14.7	15.0
21H STOMION TO VERTEX	.10	.07	.23	2.75	16.3	16.5	16.6	16.9	17.1	17.4
22H MENTON TO VERTEX	.10	.07	.36	2.86	20.8	21.0	21.1	21.4	21.5	21.8
23H FACE LENGTH	.07	.05	.07	2.54	11.3	11.5	11.6	11.8	11.9	12.1
24H CRINION-MENTON	.08	.06	-.04	3.06	18.1	18.4	18.5	18.7	18.8	19.0
25H MINIMUM FRONTAL BR	.08	.06	-.15	2.19	10.7	10.9	11.0	11.3	11.4	11.6
26H FACE B/BIZYGOMATIC	.05	.04	-.38	2.70	13.5	13.7	13.7	13.9	14.0	14.1
27H BIOCULAR BREADTH	.05	.03	-.10	3.25	9.9	10.0	10.1	10.2	10.3	10.4
28H INTERPUILLARY DIS	.05	.03	.05	3.17	5.7	5.8	5.8	5.0	5.0	5.1
29H NOSE LENGTH	.04	.03	.31	2.50	4.8	4.8	4.9	5.0	5.0	5.2
30H NOSE BREADTH	.05	.03	.30	2.22	3.4	3.5	3.6	3.7	3.8	4.0
31H MOUTH BRTH/SMILING	.07	.05	.23	2.34	6.0	6.2	6.3	6.5	6.6	6.9
32H EAR LENGTH	.04	.03	-.27	3.53	6.0	6.1	6.2	6.3	6.3	6.4
33H EAR BREADTH	.04	.03	.21	3.46	4.2	4.2	4.3	4.4	4.4	4.5
34H BIAURICULAR BR	.09	.06	.18	2.98	17.4	17.6	17.7	18.0	18.1	18.3
35H HEAD CIRCUMFERENCE	.15	.11	.11	2.94	55.0	55.5	55.6	56.0	56.2	56.6
36H HEAD BREADTH	.05	.03	-.25	2.20	14.7	14.9	15.0	15.1	15.1	15.3
36H HEAD LENGTH	.00	.05	.18	3.63	19.1	19.3	19.4	19.5	19.6	19.8

APPENDIX B

FREQUENCY TABLES

For each set of measurement data, a frequency table is given in this appendix. These are the tables used in the computation of the percentile values. Interval widths were chosen so that the number of intervals in each table did not exceed 50. Where appropriate, interval widths of five or ten millimeters were used; when this was done, the lower limits of the intervals were selected so that they had values ending in 0.25 centimeters or 0.75 centimeters to minimize the effect of any possible overuse of 0's or 5's as final digits. Measurement values were treated as though they extended over a range of from half a unit below the recorded value to half a unit above it. Because of this way of handling the data, the limits of the frequency table will exceed those of the recorded data at both ends of the scale. Actual recorded maximum and minimum values can be found in the XVAL printouts in Appendix C.

In each table, the actual frequencies are listed in the columns labeled FRQ, the cumulative frequencies in the columns headed CUMF, the frequencies expressed as percentages of the total count in the columns headed FRQ%, and the cumulative percents in the columns headed CUMF%.

In these tables, the intervals are shown in centimeters, except those for weight which are given in pounds.

B-1. FREQUENCY TABLES FOR THE CORE-SUBSERIES 1 MEASUREMENTS

1C WEIGHT				
RANGES	FRQ	CUMF	FRQ%	CUMF%
233.75-236.75	1	287	.35	100.00
230.75-233.75	0	286	0.00	99.65
227.75-230.75	0	286	0.00	99.65
224.75-227.75	0	286	0.00	99.65
221.75-224.75	0	286	0.00	99.65
218.75-221.75	1	286	.35	99.65
215.75-218.75	2	285	.70	99.30
212.75-215.75	3	283	1.05	98.61
209.75-212.75	3	280	1.05	97.56
206.75-209.75	0	277	0.00	96.52
203.75-206.75	1	277	.35	96.52
200.75-203.75	2	276	.70	96.17
197.75-200.75	7	274	2.44	95.47
194.75-197.75	6	267	2.09	93.03
191.75-194.75	4	261	1.39	90.94
188.75-191.75	4	257	1.39	89.55
185.75-188.75	3	253	1.05	88.15
182.75-185.75	8	250	2.79	87.11
179.75-182.75	7	242	2.44	84.32
176.75-179.75	9	235	3.14	81.88
173.75-176.75	8	226	2.79	78.75
170.75-173.75	7	218	2.44	75.96
167.75-170.75	8	211	2.79	73.52
164.75-167.75	6	203	2.09	70.73
161.75-164.75	9	197	3.14	68.64
158.75-161.75	8	188	2.79	65.51
155.75-158.75	15	180	5.23	62.72
152.75-155.75	13	165	4.53	57.49
149.75-152.75	17	152	5.92	52.96
146.75-149.75	18	135	6.27	47.04
143.75-146.75	15	117	5.23	40.77
140.75-143.75	12	102	4.18	35.54
137.75-140.75	21	90	7.32	31.36
134.75-137.75	19	69	6.62	24.04
131.75-134.75	17	50	5.92	17.42
128.75-131.75	8	33	2.79	11.50
125.75-128.75	6	25	2.09	8.71
122.75-125.75	4	19	1.39	6.62
119.75-122.75	6	15	2.09	5.23
116.75-119.75	4	9	1.39	3.14
113.75-116.75	2	5	.70	1.74
110.75-113.75	0	3	0.00	1.05
107.75-110.75	0	3	0.00	1.05
104.75-107.75	0	3	0.00	1.05
101.75-104.75	3	3	1.05	1.05

2C STATURE				
RANGES	FRQ	CUMF	FRQ%	CUMF%
196.75-197.75	1	287	.35	100.00
195.75-196.75	0	286	0.00	99.65
194.75-195.75	0	286	0.00	99.65
193.75-194.75	0	286	0.00	99.65
192.75-193.75	1	286	.35	99.65
191.75-192.75	0	285	0.00	99.30
190.75-191.75	1	285	.35	99.30
189.75-190.75	2	284	.70	98.95
188.75-189.75	1	282	.35	98.26
187.75-188.75	0	281	0.00	97.91
186.75-187.75	5	281	1.74	97.91
185.75-186.75	1	276	.35	96.17
184.75-185.75	4	275	1.39	95.02
183.75-184.75	3	271	1.05	94.43
182.75-183.75	5	268	1.74	93.38
181.75-182.75	9	263	3.14	91.64
180.75-181.75	11	254	3.83	88.50
179.75-180.75	10	243	3.48	84.67
178.75-179.75	15	233	5.23	81.18
177.75-178.75	14	218	4.88	75.96
176.75-177.75	14	204	4.88	71.08
175.75-176.75	16	190	5.57	66.20
174.75-175.75	21	174	7.32	60.63
173.75-174.75	17	153	5.92	53.31
172.75-173.75	16	136	5.57	47.39
171.75-172.75	19	120	6.62	41.81
170.75-171.75	12	101	4.18	35.19
169.75-170.75	10	89	3.48	31.01
168.75-169.75	10	79	6.27	27.53
167.75-168.75	16	61	5.57	21.25
166.75-167.75	13	45	4.53	15.68
165.75-166.75	5	32	1.74	11.15
164.75-165.75	5	27	1.74	9.41
163.75-164.75	3	22	1.05	7.67
162.75-163.75	5	19	1.74	6.62
161.75-162.75	3	14	1.05	4.88
160.75-161.75	1	11	.35	3.83
159.75-160.75	3	10	1.05	3.48
158.75-159.75	3	7	1.05	2.44
157.75-158.75	1	4	.35	1.39
156.75-157.75	0	3	0.00	1.05
155.75-156.75	1	3	.35	1.05
154.75-155.75	0	2	0.00	.70
153.75-154.75	0	2	0.00	.70
152.75-153.75	2	2	.70	.70

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

4C AXILLA HEIGHT				
RANGES	FRQ	CUMF	FRQ%	CUMF%
146.75-149.75	1	287	.35	100.00
147.75-148.75	0	286	0.00	99.65
146.75-147.75	0	286	0.00	99.65
145.75-146.75	0	286	0.00	99.65
144.75-145.75	3	286	1.05	99.65
143.75-144.75	0	283	0.00	98.61
142.75-143.75	3	283	1.05	98.61
141.75-142.75	3	280	1.05	97.56
140.75-141.75	4	277	1.39	96.52
139.75-140.75	8	273	2.79	95.12
138.75-139.75	8	265	2.79	92.33
137.75-138.75	10	257	3.48	89.55
136.75-137.75	10	247	3.48	86.06
135.75-136.75	9	237	3.14	82.58
134.75-135.75	15	228	5.23	79.44
133.75-134.75	20	213	6.97	74.22
132.75-133.75	21	193	7.32	67.25
131.75-132.75	22	172	7.67	59.93
130.75-131.75	18	150	6.27	52.26
129.75-130.75	22	132	7.07	45.99
128.75-129.75	15	110	5.23	38.33
127.75-128.75	14	95	4.88	33.10
126.75-127.75	21	81	7.32	28.22
125.75-126.75	15	60	5.23	20.91
124.75-125.75	11	45	3.83	15.68
123.75-124.75	8	34	2.79	11.85
122.75-123.75	4	26	1.39	9.06
121.75-122.75	2	22	.70	7.67
120.75-121.75	8	20	2.79	6.97
119.75-120.75	3	12	1.05	4.18
118.75-119.75	4	9	1.39	3.14
117.75-118.75	1	5	.35	1.74
116.75-117.75	0	4	0.00	1.39
115.75-116.75	1	4	.35	1.39
114.75-115.75	2	3	.70	1.05
113.75-114.75	0	1	0.00	.35
112.75-113.75	1	1	.35	.35

2T SUPRASTERNAL HGT				
RANGES	FRQ	CUMF	FRQ%	CUMF%
161.75-162.75	1	287	.35	100.00
160.75-161.75	0	286	0.00	99.65
159.75-160.75	0	286	0.00	99.65
158.75-159.75	1	286	.35	99.65
157.75-158.75	0	285	0.00	99.30
156.75-157.75	1	285	.35	99.30
155.75-156.75	3	284	1.05	98.95
154.75-155.75	2	281	.70	97.91
153.75-154.75	3	279	1.05	97.21
152.75-153.75	3	276	1.05	96.17
151.75-152.75	4	273	1.39	95.12
150.75-151.75	8	269	2.79	93.73
149.75-150.75	5	261	1.74	90.94
148.75-149.75	13	256	4.53	89.20
147.75-148.75	12	243	4.18	84.67
146.75-147.75	18	231	6.27	80.49
145.75-146.75	9	213	3.14	74.22
144.75-145.75	20	204	6.97	71.08
143.75-144.75	17	184	5.92	64.11
142.75-143.75	25	167	8.71	58.19
141.75-142.75	18	142	6.27	49.48
140.75-141.75	23	124	8.01	43.21
139.75-140.75	13	101	4.53	35.19
138.75-139.75	19	88	6.62	30.66
137.75-138.75	11	69	3.83	24.04
136.75-137.75	13	58	4.53	20.21
135.75-136.75	13	45	4.53	15.68
134.75-135.75	7	32	2.44	11.15
133.75-134.75	3	25	1.05	8.71
132.75-133.75	6	22	2.09	7.67
131.75-132.75	6	16	2.09	5.57
130.75-131.75	1	10	.35	3.48
129.75-130.75	2	9	.70	3.14
128.75-129.75	4	7	1.39	2.44
127.75-128.75	0	3	0.00	1.05
126.75-127.75	1	3	.35	1.05
125.75-126.75	0	2	0.00	.70
124.75-125.75	1	2	.35	.70
123.75-124.75	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

5C CHEST HEIGHT				
RANGES	FRQ	CUMF	FRQ%	CUMF%
145.75-146.75	1	287	.35	100.00
144.75-145.75	0	286	0.00	99.65
143.75-144.75	0	286	0.00	99.65
142.75-143.75	0	286	0.00	99.65
141.75-142.75	1	286	.35	99.65
140.75-141.75	0	285	0.00	99.30
139.75-140.75	2	285	.70	99.30
138.75-139.75	1	283	.35	98.61
137.75-138.75	2	282	.70	98.26
136.75-137.75	5	280	1.74	97.56
135.75-136.75	7	275	2.44	95.82
134.75-135.75	11	268	3.83	93.38
133.75-134.75	7	257	2.44	89.55
132.75-133.75	16	250	5.57	87.11
131.75-132.75	10	234	3.48	81.53
130.75-131.75	17	224	5.92	78.05
129.75-130.75	19	217	6.62	72.13
128.75-129.75	14	188	4.88	65.51
127.75-128.75	19	174	6.62	60.63
126.75-127.75	26	155	9.36	54.01
125.75-126.75	22	129	7.67	44.95
124.75-125.75	21	107	7.32	37.28
123.75-124.75	16	86	5.57	29.97
122.75-123.75	13	70	4.53	24.39
121.75-122.75	10	57	3.48	19.86
120.75-121.75	13	47	4.53	16.38
119.75-120.75	10	34	3.48	11.85
118.75-119.75	7	24	2.44	8.36
117.75-118.75	5	17	1.74	5.92
116.75-117.75	1	12	.35	4.18
115.75-116.75	4	11	1.39	3.83
114.75-115.75	2	7	.70	2.44
113.75-114.75	2	5	.70	1.74
112.75-113.75	1	3	.35	1.05
111.75-112.75	0	2	0.00	.70
110.75-111.75	1	2	.35	.70
109.75-110.75	1	1	.35	.35

3T SUBSTERNAL HEIGHT				
RANGES	FRQ	CUMF	FRQ%	CUMF%
139.75-140.75	1	287	.35	100.00
138.75-139.75	0	286	0.00	99.65
137.75-138.75	0	286	0.00	99.65
136.75-137.75	0	286	0.00	99.65
135.75-136.75	1	286	.35	99.65
134.75-135.75	1	285	.35	99.30
133.75-134.75	1	284	.35	98.95
132.75-133.75	4	283	1.39	98.61
131.75-132.75	7	279	2.44	97.21
130.75-131.75	2	272	.70	94.77
129.75-130.75	13	270	4.53	94.08
128.75-129.75	8	257	2.79	89.55
127.75-128.75	7	249	2.44	86.76
126.75-127.75	14	242	4.88	84.32
125.75-126.75	22	228	7.67	79.44
124.75-125.75	20	206	6.97	71.78
123.75-124.75	13	186	4.53	64.61
122.75-123.75	26	173	9.36	60.28
121.75-122.75	14	147	4.88	51.22
120.75-121.75	34	133	11.85	46.34
119.75-120.75	22	99	7.67	34.49
118.75-119.75	18	77	6.27	26.83
117.75-118.75	11	59	3.83	20.56
116.75-117.75	5	48	1.74	16.72
115.75-116.75	10	43	3.48	14.98
114.75-115.75	10	33	3.48	11.50
113.75-114.75	8	23	2.79	8.01
112.75-113.75	4	15	1.39	5.23
111.75-112.75	1	11	.35	3.83
110.75-111.75	4	10	1.39	3.48
109.75-110.75	2	6	.70	2.09
108.75-109.75	1	4	.35	1.39
107.75-108.75	1	3	.35	1.05
106.75-107.75	1	2	.35	.70
105.75-106.75	0	1	0.00	.35
104.75-105.75	0	1	0.00	.35
103.75-104.75	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

4T ELBOW (RADIALE) HT

RANGES	FRQ	CUMF	FRQX	CUMFX
125.75-126.75	1	287	.35	100.00
124.75-125.75	0	286	0.00	99.65
123.75-124.75	0	286	0.00	99.65
122.75-123.75	0	286	0.00	99.65
121.75-122.75	1	286	.35	99.65
120.75-121.75	3	285	1.05	99.30
119.75-120.75	1	282	.35	98.26
118.75-119.75	3	281	1.05	97.91
117.75-118.75	5	278	1.74	96.86
116.75-117.75	6	273	2.09	95.12
115.75-116.75	9	267	3.14	93.03
114.75-115.75	8	258	2.79	89.90
113.75-114.75	17	250	5.92	87.11
112.75-113.75	19	233	6.62	81.18
111.75-112.75	17	214	5.92	74.56
110.75-111.75	24	197	8.36	66.64
109.75-110.75	26	173	9.06	60.28
108.75-109.75	18	147	6.27	51.22
107.75-108.75	22	129	7.67	44.95
106.75-107.75	18	107	6.27	37.28
105.75-106.75	22	89	7.67	31.01
104.75-105.75	16	67	5.57	23.34
103.75-104.75	19	51	6.62	17.77
102.75-103.75	7	32	2.44	11.15
101.75-102.75	4	25	1.39	8.71
100.75-101.75	6	21	2.09	7.32
99.75-100.75	8	15	2.79	5.23
98.75- 99.75	1	7	.35	2.44
97.75- 98.75	2	6	.70	2.09
96.75- 97.75	0	4	0.00	1.39
95.75- 96.75	2	4	.70	1.39
94.75- 95.75	1	2	.35	.70
93.75- 94.75	1	1	.35	.35

5T KNUCKLE HEIGHT

RANGES	FRQ	CUMF	FRQX	CUMFX
88.75- 89.75	1	287	.35	100.00
87.75- 88.75	0	286	0.00	99.65
86.75- 87.75	1	286	.35	99.65
85.75- 86.75	0	285	0.00	99.30
84.75- 85.75	1	285	.35	99.30
83.75- 84.75	3	284	1.05	98.95
82.75- 83.75	6	281	2.09	97.91
81.75- 82.75	6	275	2.49	95.82
80.75- 81.75	8	269	2.79	93.73
79.75- 80.75	15	261	5.23	90.94
78.75- 79.75	19	246	6.62	85.71
77.75- 78.75	24	227	8.36	79.09
76.75- 77.75	24	203	8.36	70.73
75.75- 76.75	27	179	9.41	62.37
74.75- 75.75	26	152	9.06	52.96
73.75- 74.75	27	126	9.41	43.90
72.75- 73.75	33	99	11.50	34.49
71.75- 72.75	16	66	5.57	23.00
70.75- 71.75	15	50	5.23	17.42
69.75- 70.75	14	39	4.88	12.20
68.75- 69.75	7	21	2.44	7.32
67.75- 68.75	5	14	1.74	4.88
66.75- 67.75	4	9	1.39	3.14
65.75- 66.75	2	5	.70	1.74
64.75- 65.75	2	3	.70	1.05
63.75- 64.75	0	1	0.00	.35
62.75- 63.75	0	1	0.00	.35
61.75- 62.75	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

6C WAIST HEIGHT				
RANGES	FRQ	CUMF	FRQX	CUMFX
118.75-119.75	2	287	.70	100.00
117.75-118.75	0	285	0.00	99.30
116.75-117.75	2	285	.70	99.30
115.75-116.75	1	283	.35	98.61
114.75-115.75	5	282	1.74	98.26
113.75-114.75	8	277	2.79	96.52
112.75-113.75	4	269	1.39	93.73
111.75-112.75	3	265	1.05	92.33
110.75-111.75	11	262	3.83	91.29
109.75-110.75	12	251	4.16	87.46
108.75-109.75	13	239	4.53	83.28
107.75-108.75	18	226	6.27	78.75
106.75-107.75	8	208	2.79	72.47
105.75-106.75	17	200	5.92	69.69
104.75-105.75	24	183	8.36	63.76
103.75-104.75	30	159	10.45	55.40
102.75-103.75	17	129	5.92	44.95
101.75-102.75	16	112	5.57	39.32
100.75-101.75	17	96	5.92	33.45
99.75-100.75	16	79	5.57	27.53
98.75-99.75	10	63	3.48	21.95
97.75-98.75	12	53	4.18	18.47
96.75-97.75	7	41	2.44	14.29
95.75-96.75	7	34	2.44	11.85
94.75-95.75	10	27	3.48	9.41
93.75-94.75	7	17	2.44	5.92
92.75-93.75	5	10	1.74	3.48
91.75-92.75	1	5	.35	1.74
90.75-91.75	3	4	1.05	1.39
89.75-90.75	1	1	.35	.35

6C BUTTOCK HEIGHT				
RANGES	FRQ	CUMF	FRQX	CUMFX
104.75-105.75	1	287	.35	100.00
103.75-104.75	0	286	0.00	99.65
102.75-103.75	1	286	.35	99.65
101.75-102.75	1	265	.35	99.30
100.75-101.75	1	284	.35	98.95
99.75-100.75	1	283	.35	98.61
98.75-99.75	4	262	1.39	98.26
97.75-98.75	7	278	2.44	96.86
96.75-97.75	4	271	1.39	94.43
95.75-96.75	10	267	3.48	93.03
94.75-95.75	12	257	4.18	89.55
93.75-94.75	10	245	3.48	85.37
92.75-93.75	17	235	5.92	81.88
91.75-92.75	18	218	6.27	75.96
90.75-91.75	28	200	9.76	69.69
89.75-90.75	19	172	6.62	59.93
88.75-89.75	29	153	10.10	53.31
87.75-88.75	28	124	9.76	43.21
86.75-87.75	17	96	5.92	33.45
85.75-86.75	13	79	4.53	27.53
84.75-85.75	14	66	4.68	23.00
83.75-84.75	13	52	4.53	18.12
82.75-83.75	11	39	3.83	13.59
81.75-82.75	5	28	1.74	9.76
80.75-81.75	7	23	2.44	8.01
79.75-80.75	6	16	2.09	5.57
78.75-79.75	4	10	1.39	3.48
77.75-78.75	2	6	.71	2.09
76.75-77.75	3	4	1.05	1.39
75.75-76.75	0	1	0.00	.35
74.75-75.75	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

7T GLUTEAL FURROW HGT				
RANGES	FRQ	CUMF	FRQ%	CUMF%
93.75- 94.75	1	287	.35	100.00
92.75- 93.75	0	286	0.00	99.65
91.75- 92.75	0	286	0.00	99.65
90.75- 91.75	2	286	.70	99.65
89.75- 90.75	1	284	.35	98.95
88.75- 89.75	5	283	1.74	98.61
87.75- 88.75	10	278	3.48	96.86
86.75- 87.75	6	268	2.09	93.38
85.75- 86.75	7	262	2.44	91.29
84.75- 85.75	9	255	3.14	88.85
83.75- 84.75	16	246	5.57	85.71
82.75- 83.75	25	230	8.71	80.14
81.75- 82.75	19	205	6.62	71.43
80.75- 81.75	29	186	10.10	64.81
79.75- 80.75	29	157	10.10	54.70
78.75- 79.75	25	128	8.71	44.60
77.75- 78.75	24	103	8.36	35.89
76.75- 77.75	23	79	8.01	27.53
75.75- 76.75	16	56	5.57	19.51
74.75- 75.75	10	40	3.48	13.94
73.75- 74.75	11	30	3.83	10.45
72.75- 73.75	6	19	2.09	6.62
71.75- 72.75	7	13	2.44	4.53
70.75- 71.75	3	6	1.05	2.09
69.75- 70.75	1	3	.35	1.05
68.75- 69.75	1	2	.35	.70
67.75- 68.75	0	1	0.00	.35
66.75- 67.75	0	1	0.00	.35
65.75- 66.75	1	1	.35	.35

8T TIBIALE HEIGHT				
RANGES	FRQ	CUMF	FRQ%	CUMF%
55.75- 56.25	1	283	.35	100.00
55.25- 55.75	1	282	.35	99.65
54.75- 55.25	1	281	.35	99.29
54.25- 54.75	2	280	.71	98.94
53.75- 54.25	1	278	.35	98.23
53.25- 53.75	1	277	.35	97.88
52.75- 53.25	5	276	1.77	97.53
52.25- 52.75	11	271	3.89	95.76
51.75- 52.25	11	260	3.89	91.87
51.25- 51.75	10	249	3.53	87.99
50.75- 51.25	11	239	3.89	84.45
50.25- 50.75	17	228	6.01	80.57
49.75- 50.25	15	211	5.30	74.56
49.25- 49.75	16	196	5.65	69.26
48.75- 49.25	21	180	7.42	63.60
48.25- 48.75	18	159	6.36	56.18
47.75- 48.25	15	141	5.30	49.82
47.25- 47.75	26	126	9.19	44.52
46.75- 47.25	20	100	7.07	35.34
46.25- 46.75	24	80	8.48	28.27
45.75- 46.25	13	56	4.59	19.79
45.25- 45.75	12	43	4.24	15.19
44.75- 45.25	9	31	3.18	10.95
44.25- 44.75	2	22	.71	7.77
43.75- 44.25	3	20	1.06	7.07
43.25- 43.75	3	17	1.06	6.01
42.75- 43.25	4	14	1.41	4.95
42.25- 42.75	3	10	1.06	3.53
41.75- 42.25	3	7	1.06	2.47
41.25- 41.75	1	4	.35	1.41
40.75- 41.25	0	3	0.00	1.06
40.25- 40.75	3	3	1.06	1.06

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

RANGES	FRQ	CUMF	FRQX	CUMFX
39.25- 39.55	1	287	.35	100.00
38.95- 39.25	0	286	0.00	99.65
38.65- 38.95	1	286	.35	99.65
38.35- 38.65	0	285	0.00	99.30
38.05- 38.35	0	285	0.00	99.30
37.75- 38.05	2	285	.70	99.30
37.45- 37.75	2	283	.70	98.61
37.15- 37.45	1	281	.35	97.91
36.85- 37.15	6	280	2.09	97.56
36.55- 36.85	4	274	1.39	95.47
36.25- 36.55	9	270	3.14	94.08
35.95- 36.25	7	261	2.44	90.94
35.65- 35.95	10	254	3.48	88.50
35.35- 35.65	16	244	5.57	85.02
35.05- 35.35	9	228	3.14	79.44
34.75- 35.05	17	219	5.92	76.31
34.45- 34.75	16	202	5.57	70.38
34.15- 34.45	18	186	6.27	64.81
33.85- 34.15	15	168	5.23	58.54
33.55- 33.85	18	153	6.27	53.31
33.25- 33.55	15	135	5.23	47.04
32.95- 33.25	20	120	6.97	41.81
32.65- 32.95	13	100	4.53	34.84
32.35- 32.65	23	87	8.31	30.31
32.05- 32.35	16	64	5.57	22.30
31.75- 32.05	15	48	5.23	16.72
31.45- 31.75	7	33	2.44	11.50
31.15- 31.45	9	26	3.14	9.06
30.85- 31.15	2	17	.70	5.92
30.55- 30.85	2	15	.70	5.23
30.25- 30.55	4	13	1.39	4.53
29.95- 30.25	4	9	1.39	3.14
29.65- 29.95	0	5	0.00	1.74
29.35- 29.65	2	5	.70	1.74
29.05- 29.35	1	3	.35	1.05
28.75- 29.05	1	2	.35	.70
28.45- 28.75	0	1	0.00	.35
28.15- 28.45	0	1	0.00	.35
27.85- 28.15	1	1	.35	.35

RANGES	FRQ	CUMF	FRQX	CUMFX
31.35- 31.55	1	287	.35	100.00
31.15- 31.35	0	286	0.00	99.65
30.95- 31.15	0	286	0.00	99.65
30.75- 30.95	0	286	0.00	99.65
30.55- 30.75	1	286	.35	99.65
30.35- 30.55	4	285	1.39	99.30
30.15- 30.35	2	281	.70	97.91
29.95- 30.15	2	279	.70	97.21
29.75- 29.95	2	277	.70	96.52
29.55- 29.75	4	275	1.39	95.82
29.35- 29.55	1	271	.35	94.43
29.15- 29.35	5	270	1.74	94.08
28.95- 29.15	1	265	.35	92.33
28.75- 28.95	7	264	2.44	91.99
28.55- 28.75	9	257	3.14	89.55
28.35- 28.55	12	248	4.18	86.41
28.15- 28.35	5	236	1.74	82.23
27.95- 28.15	11	231	3.83	80.49
27.75- 27.95	12	220	4.18	76.66
27.55- 27.75	20	208	6.97	72.47
27.35- 27.55	14	186	4.88	65.21
27.15- 27.35	5	174	1.74	60.63
26.95- 27.15	13	169	4.53	58.89
26.75- 26.95	10	156	3.48	54.36
26.55- 26.75	17	146	5.92	50.87
26.35- 26.55	10	129	3.48	44.95
26.15- 26.35	18	119	6.27	41.46
25.95- 26.15	18	101	6.27	35.19
25.75- 25.95	17	83	5.92	28.92
25.55- 25.75	11	66	3.83	23.00
25.35- 25.55	13	55	4.53	19.16
25.15- 25.35	6	42	2.09	14.63
24.95- 25.15	10	36	3.48	12.54
24.75- 24.95	2	26	.70	9.06
24.55- 24.75	4	24	1.39	8.30
24.35- 24.55	6	20	2.09	5.97
24.15- 24.35	5	14	1.74	4.58
23.95- 24.15	1	9	.35	3.14
23.75- 23.95	1	8	.35	2.79
23.55- 23.75	2	7	.70	2.44
23.35- 23.55	2	5	.70	1.74
23.15- 23.35	0	3	0.00	1.05
22.95- 23.15	0	3	0.00	1.05
22.75- 22.95	1	3	.35	1.05
22.55- 22.75	0	2	0.00	.70
22.35- 22.55	0	2	0.00	.70
22.15- 22.35	0	2	0.00	.70
21.95- 22.15	1	2	.35	.70
21.75- 21.95	0	1	0.00	.35
21.55- 21.75	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

11C SITTING HEIGHT

RANGES	FRQ	CUMF	FRQ%	CUMF%
99.75-100.25	2	287	.70	100.00
99.25- 99.75	0	285	0.00	99.30
98.75- 99.25	0	285	0.00	99.30
98.25- 98.75	0	285	0.00	99.30
97.75- 98.25	2	285	.70	99.30
97.25- 97.75	1	283	.35	98.61
96.75- 97.25	2	282	.70	98.26
96.25- 96.75	5	280	1.74	97.56
95.75- 96.25	2	275	.70	95.82
95.25- 95.75	5	273	1.74	95.12
94.75- 95.25	2	268	.70	93.38
94.25- 94.75	4	266	1.39	92.68
93.75- 94.25	6	262	2.09	91.29
93.25- 93.75	8	256	2.79	89.20
92.75- 93.25	6	248	2.09	86.41
92.25- 92.75	10	242	3.48	84.32
91.75- 92.25	18	232	6.27	80.84
91.25- 91.75	11	214	3.83	74.56
90.75- 91.25	9	203	3.14	70.73
90.25- 90.75	13	194	4.53	67.60
89.75- 90.25	19	181	6.62	63.07
89.25- 89.75	16	162	5.57	56.45
88.75- 89.25	19	146	6.62	50.87
88.25- 88.75	22	127	7.67	44.25
87.75- 88.25	14	105	4.88	36.59
87.25- 87.75	19	91	6.62	31.71
86.75- 87.25	10	72	3.48	25.09
86.25- 86.75	12	62	4.18	21.60
85.75- 86.25	10	50	3.48	17.42
85.25- 85.75	4	40	1.39	13.94
84.75- 85.25	7	36	2.44	12.54
84.25- 84.75	5	29	1.74	10.10
83.75- 84.25	6	24	2.09	8.36
83.25- 83.75	6	18	2.09	6.27
82.75- 83.25	2	12	.70	4.18
82.25- 82.75	1	10	.35	3.48
81.75- 82.25	3	9	1.05	3.14
81.25- 81.75	2	6	.70	2.09
80.75- 81.25	1	4	.35	1.39
80.25- 80.75	1	3	.35	1.05
79.75- 80.25	0	2	0.00	.70
79.25- 79.75	0	2	0.00	.70
78.75- 79.25	1	2	.35	.70
78.25- 78.75	0	1	0.00	.35
77.75- 78.25	1	1	.35	.35

12C EYE HEIGHT/SITTING

RANGES	FRQ	CUMF	FRQ%	CUMF%
86.25- 86.75	2	287	.70	100.00
85.75- 86.25	1	285	.35	99.30
85.25- 85.75	0	284	0.00	98.95
84.75- 85.25	2	284	.70	98.95
84.25- 84.75	2	282	.70	98.26
83.75- 84.25	4	280	1.39	97.56
83.25- 83.75	2	276	.70	96.17
82.75- 83.25	7	274	2.44	95.47
82.25- 82.75	4	267	1.39	93.03
81.75- 82.25	6	263	2.09	91.64
81.25- 81.75	9	257	3.14	89.55
80.75- 81.25	8	248	2.79	86.41
80.25- 80.75	6	244	2.09	83.62
79.75- 80.25	13	234	4.53	81.53
79.25- 79.75	16	221	5.57	77.00
78.75- 79.25	13	205	4.53	71.43
78.25- 78.75	16	192	5.57	66.90
77.75- 78.25	17	176	5.92	61.32
77.25- 77.75	18	159	6.27	55.40
76.75- 77.25	15	141	5.23	49.13
76.25- 76.75	21	126	7.32	43.90
75.75- 76.25	17	105	5.92	36.59
75.25- 75.75	15	88	5.23	30.66
74.75- 75.25	18	73	6.27	25.44
74.25- 74.75	10	55	3.48	19.16
73.75- 74.25	9	45	3.14	15.68
73.25- 73.75	9	36	3.14	12.54
72.75- 73.25	7	27	2.44	9.41
72.25- 72.75	4	20	1.39	6.97
71.75- 72.25	3	16	1.05	5.57
71.25- 71.75	2	13	.70	4.53
70.75- 71.25	3	11	1.05	3.83
70.25- 70.75	2	8	.70	2.79
69.75- 70.25	3	6	1.05	2.09
69.25- 69.75	0	3	0.00	1.05
68.75- 69.25	0	3	0.00	1.05
68.25- 68.75	1	3	.35	1.05
67.75- 68.25	0	2	0.00	.70
67.25- 67.75	1	2	.35	.70
66.75- 67.25	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

13C SHOULDER-ELBOW LTH				
RANGES	FRQ	CUMF	FRQX	CUMFX
41.65- 41.95	1	287	.35	100.00
41.35- 41.65	0	286	0.00	99.65
41.05- 41.35	1	286	.35	99.65
40.75- 41.05	1	285	.35	99.30
40.45- 40.75	1	284	.35	98.95
40.15- 40.45	2	283	.70	98.61
39.85- 40.15	2	281	.70	97.91
39.55- 39.85	4	279	1.39	97.21
39.25- 39.55	7	275	2.44	95.82
38.95- 39.25	4	268	1.39	93.38
38.65- 38.95	7	264	2.44	91.99
38.35- 38.65	8	257	2.79	89.55
38.05- 38.35	10	249	3.48	86.76
37.75- 38.05	19	239	6.62	83.28
37.45- 37.75	11	220	3.83	76.66
37.15- 37.45	13	209	4.53	72.82
36.85- 37.15	13	196	4.53	68.29
36.55- 36.85	24	183	8.36	63.76
36.25- 36.55	19	159	6.62	55.40
35.95- 36.25	12	140	4.18	48.78
35.65- 35.95	17	128	5.92	44.60
35.35- 35.65	24	111	8.36	38.68
35.05- 35.35	13	87	4.53	30.31
34.75- 35.05	21	74	7.32	25.78
34.45- 34.75	15	53	5.23	18.47
34.15- 34.45	7	38	2.44	13.24
33.85- 34.15	7	31	2.44	10.80
33.55- 33.85	7	24	2.44	8.36
33.25- 33.55	5	17	1.74	5.92
32.95- 33.25	1	12	.35	4.18
32.65- 32.95	4	11	1.39	3.83
32.35- 32.65	2	7	.70	2.44
32.05- 32.35	1	5	.35	1.74
31.75- 32.05	0	4	0.00	1.39
31.45- 31.75	2	4	.70	1.39
31.15- 31.45	2	2	.70	.70

11T ELBOW-GRIP LENGTH				
RANGES	FRQ	CUMF	FRQX	CUMFX
40.75- 41.05	1	287	.35	100.00
40.45- 40.75	0	286	0.00	99.65
40.15- 40.45	1	286	.35	99.65
39.85- 40.15	1	285	.35	99.30
39.55- 39.85	2	284	.70	98.95
39.25- 39.55	1	282	.35	98.26
38.95- 39.25	3	281	1.05	97.91
38.65- 38.95	1	278	.35	96.86
38.35- 38.65	5	277	1.74	96.52
38.05- 38.35	2	272	.70	94.77
37.75- 38.05	4	270	1.39	94.08
37.45- 37.75	6	266	2.09	92.68
37.15- 37.45	6	260	2.09	90.59
36.85- 37.15	9	254	3.14	88.50
36.55- 36.85	15	245	5.23	85.37
36.25- 36.55	14	230	4.88	80.14
35.95- 36.25	10	216	3.48	75.26
35.65- 35.95	21	206	7.32	71.78
35.35- 35.65	14	185	4.88	64.46
35.05- 35.35	21	171	7.32	59.58
34.75- 35.05	21	150	7.32	52.26
34.45- 34.75	19	129	6.62	44.95
34.15- 34.45	16	110	5.57	38.33
33.85- 34.15	20	94	6.97	32.75
33.55- 33.85	11	74	3.83	25.78
33.25- 33.55	12	63	4.18	21.95
32.95- 33.25	12	51	4.18	17.77
32.65- 32.95	6	39	2.09	13.59
32.35- 32.65	6	33	2.09	11.50
32.05- 32.35	9	27	3.14	9.41
31.75- 32.05	2	18	.70	6.27
31.45- 31.75	3	16	1.05	5.57
31.15- 31.45	4	13	1.39	4.53
30.85- 31.15	3	9	1.05	3.14
30.55- 30.85	3	6	1.05	2.09
30.25- 30.55	0	3	0.00	1.05
29.95- 30.25	1	3	.35	1.05
29.65- 29.95	1	2	.35	.70
29.35- 29.65	0	1	0.00	.35
29.05- 29.35	0	1	0.00	.35
28.75- 29.05	0	1	0.00	.35
28.45- 28.75	0	1	0.00	.35
28.15- 28.45	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

14C ELBOW-FINGERTIP LH

RANGES	FRQ	CUMF	FRQX	CUMFX
54.55- 54.85	1	287	.35	100.00
54.25- 54.55	1	286	.35	99.65
53.95- 54.25	0	285	0.00	99.30
53.65- 53.95	0	285	0.00	99.30
53.35- 53.65	2	285	.70	99.30
53.05- 53.35	2	283	.70	98.61
52.75- 53.05	1	281	.35	97.91
52.45- 52.75	3	280	1.05	97.56
52.15- 52.45	2	277	.70	96.52
51.85- 52.15	4	275	1.39	95.82
51.55- 51.85	4	271	1.39	94.43
51.25- 51.55	3	267	1.05	93.03
50.95- 51.25	6	264	2.09	91.99
50.65- 50.95	4	258	1.39	89.90
50.35- 50.65	5	254	1.74	88.50
50.05- 50.35	8	249	2.79	86.76
49.75- 50.05	12	241	4.18	83.97
49.45- 49.75	10	229	3.48	79.79
49.15- 49.45	10	219	3.48	76.31
48.85- 49.15	12	209	4.18	72.82
48.55- 48.85	13	197	4.53	68.64
48.25- 48.55	21	184	7.32	64.11
47.95- 48.25	11	163	3.83	56.79
47.65- 47.95	13	152	4.53	52.96
47.35- 47.65	13	139	4.53	48.43
47.05- 47.35	19	126	6.62	43.90
46.75- 47.05	11	107	3.83	37.28
46.45- 46.75	14	96	4.88	33.45
46.15- 46.45	14	82	4.88	28.57
45.85- 46.15	9	68	3.14	23.69
45.55- 45.85	7	59	2.44	20.56
45.25- 45.55	11	52	3.83	18.12
44.95- 45.25	9	41	3.14	14.29
44.65- 44.95	5	32	1.74	11.15
44.35- 44.65	4	27	1.39	9.41
44.05- 44.35	3	23	1.05	8.01
43.75- 44.05	5	20	1.74	6.97
43.45- 43.75	4	15	1.39	5.23
43.15- 43.45	3	11	1.05	3.83
42.85- 43.15	2	8	.70	2.79
42.55- 42.85	1	6	.35	2.09
42.25- 42.55	0	5	0.00	1.74
41.95- 42.25	2	5	.70	1.74
41.65- 41.95	0	3	0.00	1.05
41.35- 41.65	0	3	0.00	1.05
41.05- 41.35	0	3	0.00	1.05
40.75- 41.05	1	3	.35	1.05
40.45- 40.75	0	2	0.00	.70
40.15- 40.45	0	2	0.00	.70
39.85- 40.15	2	2	.70	.70

15C KNEE HEIGHT/SIT

RANGES	FRQ	CUMF	FRQX	CUMFX
62.75- 63.25	2	287	.70	100.00
62.25- 62.75	1	285	.35	99.30
61.75- 62.25	2	284	.70	98.95
61.25- 61.75	2	282	.70	98.26
60.75- 61.25	1	280	.35	97.56
60.25- 60.75	4	279	1.39	97.21
59.75- 60.25	5	275	1.74	95.82
59.25- 59.75	10	270	3.48	94.08
58.75- 59.25	9	260	3.14	90.59
58.25- 58.75	10	251	3.48	87.46
57.75- 58.25	9	241	3.14	83.97
57.25- 57.75	9	232	3.14	80.84
56.75- 57.25	17	223	5.92	77.70
56.25- 56.75	19	206	6.62	71.78
55.75- 56.25	15	187	5.23	65.16
55.25- 55.75	24	172	8.36	59.93
54.75- 55.25	18	148	6.27	51.57
54.25- 54.75	18	130	6.27	45.30
53.75- 54.25	15	112	5.23	39.02
53.25- 53.75	22	97	7.67	33.80
52.75- 53.25	17	75	5.92	26.13
52.25- 52.75	14	58	4.88	20.21
51.75- 52.25	7	44	2.44	15.33
51.25- 51.75	11	37	3.83	12.89
50.75- 51.25	6	26	2.09	9.06
50.25- 50.75	6	20	2.09	6.97
49.75- 50.25	1	14	.35	4.88
49.25- 49.75	4	13	1.39	4.53
48.75- 49.25	3	9	1.05	3.14
48.25- 48.75	1	6	.35	2.09
47.75- 48.25	1	5	.35	1.74
47.25- 47.75	1	4	.35	1.39
46.75- 47.25	2	3	.70	1.05
46.25- 46.75	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

16C POPLITEAL HEIGHT					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
51.75- 52.25	1	287	.35	100.00	
51.25- 51.75	0	286	0.00	99.65	
50.75- 51.25	2	286	.70	99.65	
50.25- 50.75	1	284	.35	98.95	
49.75- 50.25	1	283	.35	98.61	
49.25- 49.75	4	282	1.39	98.26	
48.75- 49.25	6	278	2.09	96.86	
48.25- 48.75	6	272	2.09	94.77	
47.75- 48.25	8	266	2.79	92.68	
47.25- 47.75	11	256	3.83	89.90	
46.75- 47.25	13	247	4.53	86.06	
46.25- 46.75	16	234	5.57	81.53	
45.75- 46.25	16	218	5.57	75.96	
45.25- 45.75	18	202	6.27	70.38	
44.75- 45.25	18	184	6.27	64.11	
44.25- 44.75	17	166	5.92	57.84	
43.75- 44.25	24	149	8.36	51.92	
43.25- 43.75	29	125	10.10	43.55	
42.75- 43.25	17	96	5.92	33.45	
42.25- 42.75	16	79	5.57	27.53	
41.75- 42.25	18	63	6.27	21.95	
41.25- 41.75	11	45	3.83	15.68	
40.75- 41.25	6	34	2.09	11.65	
40.25- 40.75	8	28	2.79	9.76	
39.75- 40.25	7	20	2.44	6.97	
39.25- 39.75	2	13	.70	4.53	
38.75- 39.25	3	11	1.05	3.83	
38.25- 38.75	2	8	.70	2.79	
37.75- 38.25	1	6	.35	2.09	
37.25- 37.75	4	5	1.39	1.74	
36.75- 37.25	1	1	.35	.35	

17C BUTTOCK-KNEE LGTH					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
70.25- 70.75	1	287	.35	100.00	
69.75- 70.25	0	286	0.00	99.65	
69.25- 69.75	1	286	.35	99.65	
68.75- 69.25	0	285	0.00	99.30	
68.25- 68.75	0	285	0.00	99.30	
67.75- 68.25	0	265	0.00	99.30	
67.25- 67.75	2	285	.70	99.30	
66.75- 67.25	2	283	.70	98.61	
66.25- 66.75	4	261	1.39	97.91	
65.75- 66.25	5	277	1.74	96.52	
65.25- 65.75	9	272	3.14	94.77	
64.75- 65.25	5	263	1.74	91.64	
64.25- 64.75	7	256	2.44	89.90	
63.75- 64.25	11	251	3.83	87.46	
63.25- 63.75	12	240	4.18	83.62	
62.75- 63.25	19	228	6.62	79.44	
62.25- 62.75	16	209	5.57	72.82	
61.75- 62.25	11	193	3.83	67.25	
61.25- 61.75	22	182	7.67	63.41	
60.75- 61.25	21	160	7.32	55.75	
60.25- 60.75	13	139	4.53	48.43	
59.75- 60.25	18	126	6.27	43.90	
59.25- 59.75	17	108	5.92	37.63	
58.75- 59.25	13	91	4.53	31.71	
58.25- 58.75	15	78	5.23	27.18	
57.75- 58.25	17	63	5.92	21.95	
57.25- 57.75	10	46	3.48	16.03	
56.75- 57.25	13	36	4.53	12.54	
56.25- 56.75	4	23	1.39	8.01	
55.75- 56.25	6	19	2.09	6.62	
55.25- 55.75	4	13	1.39	4.53	
54.75- 55.25	1	9	.35	3.14	
54.25- 54.75	0	8	0.00	2.79	
53.75- 54.25	3	8	1.05	2.79	
53.25- 53.75	3	5	1.05	1.74	
52.75- 53.25	0	2	0.00	.70	
52.25- 52.75	2	2	.70	.70	

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

18C CHEST DEPTH				
RANGES	FRQ	CUMF	FRQX	CUMFX
27.15- 27.35	2	287	.70	100.00
26.95- 27.15	0	285	0.00	99.30
26.75- 26.95	0	285	0.00	99.30
26.55- 26.75	1	285	.35	99.30
26.35- 26.55	2	284	.70	98.95
26.15- 26.35	5	282	1.74	98.26
25.95- 26.15	3	277	1.05	96.52
25.75- 25.95	0	274	0.00	95.47
25.55- 25.75	2	274	.70	95.47
25.35- 25.55	1	272	.35	94.77
25.15- 25.35	2	271	.70	94.43
24.95- 25.15	1	269	.35	93.73
24.75- 24.95	4	268	1.39	93.38
24.55- 24.75	4	264	1.39	91.99
24.35- 24.55	8	260	2.79	90.59
24.15- 24.35	2	252	.70	87.80
23.95- 24.15	4	250	1.39	87.11
23.75- 23.95	9	240	3.14	85.71
23.55- 23.75	3	237	1.05	82.58
23.35- 23.55	3	234	1.05	81.53
23.15- 23.35	10	231	3.48	80.49
22.95- 23.15	6	221	2.09	77.00
22.75- 22.95	5	215	1.74	74.91
22.55- 22.75	7	210	2.44	73.17
22.35- 22.55	10	203	3.48	70.73
22.15- 22.35	14	193	4.88	67.25
21.95- 22.15	9	179	3.14	62.37
21.75- 21.95	5	170	1.74	59.23
21.55- 21.75	10	165	3.48	57.49
21.35- 21.55	12	155	4.18	54.01
21.15- 21.35	11	143	3.83	49.83
20.95- 21.15	12	132	4.18	45.99
20.75- 20.95	14	120	4.88	41.81
20.55- 20.75	10	106	3.48	36.93
20.35- 20.55	15	96	5.23	33.45
20.15- 20.35	12	81	4.18	28.22
19.95- 20.15	12	69	4.18	24.04
19.75- 19.95	15	57	5.23	19.86
19.55- 19.75	8	42	2.79	14.63
19.35- 19.55	8	34	2.79	11.85
19.15- 19.35	7	26	2.44	9.06
18.95- 19.15	4	19	1.39	6.62
18.75- 18.95	3	15	1.05	5.23
18.55- 18.75	3	12	1.05	4.18
18.35- 18.55	2	9	.70	3.14
18.15- 18.35	2	7	.70	2.44
17.95- 18.15	1	5	.35	1.74
17.75- 17.95	2	4	.70	1.39
17.55- 17.75	0	2	0.00	.70
17.35- 17.55	2	2	.70	.70

19C WAIST DEPTH				
RANGES	FRQ	CUMF	FRQX	CUMFX
28.75- 29.05	1	280	.36	100.00
28.45- 28.75	0	279	0.00	99.64
28.15- 28.45	1	279	.36	99.64
27.85- 28.15	0	278	0.00	99.29
27.55- 27.85	0	278	0.00	99.29
27.25- 27.55	0	278	0.00	99.29
26.95- 27.25	0	278	0.00	99.29
26.65- 26.95	1	278	.36	99.29
26.35- 26.65	3	277	1.07	98.93
26.05- 26.35	1	274	.36	97.86
25.75- 26.05	2	273	.71	97.50
25.45- 25.75	2	271	.71	96.79
25.15- 25.45	0	269	0.00	96.07
24.85- 25.15	4	269	1.43	96.07
24.55- 24.85	1	265	.36	94.64
24.25- 24.55	2	264	.71	94.29
23.95- 24.25	1	262	.36	93.57
23.65- 23.95	3	261	1.07	93.21
23.35- 23.65	6	258	2.14	92.14
23.05- 23.35	3	252	1.07	90.00
22.75- 23.05	6	249	2.14	88.93
22.45- 22.75	6	243	2.14	86.79
22.15- 22.45	5	237	1.79	84.64
21.85- 22.15	7	232	2.50	82.86
21.55- 21.85	11	225	3.93	80.36
21.25- 21.55	17	214	6.07	76.43
20.95- 21.25	12	197	4.29	70.36
20.65- 20.95	10	185	3.57	66.07
20.35- 20.65	14	175	5.00	62.50
20.05- 20.35	15	161	5.36	57.50
19.75- 20.05	16	146	5.71	52.14
19.45- 19.75	10	130	3.57	46.43
19.15- 19.45	22	120	7.86	42.86
18.85- 19.15	17	98	6.07	35.00
18.55- 18.85	13	81	4.64	28.93
18.25- 18.55	17	68	6.07	24.29
17.95- 18.25	15	51	5.36	18.21
17.65- 17.95	17	36	6.07	12.86
17.35- 17.65	9	19	3.21	6.79
17.05- 17.35	4	10	1.43	3.57
16.75- 17.05	2	6	.71	2.14
16.45- 16.75	2	4	.71	1.43
16.15- 16.45	1	2	.36	.71
15.85- 16.15	1	1	.36	.36

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

16T BIACROMIAL BREADTH				
RANGES	FRQ	CUMF	FRQX	CUMFX
44.65- 44.95	1	287	.35	100.00
44.35- 44.65	1	286	.35	99.65
44.05- 44.35	0	285	0.00	99.30
43.75- 44.05	1	285	.35	99.30
43.45- 43.75	3	284	1.05	98.95
43.15- 43.45	1	281	.35	97.91
42.85- 43.15	4	280	1.39	97.56
42.55- 42.85	5	276	1.74	96.17
42.25- 42.55	4	271	1.39	94.43
41.95- 42.25	6	267	2.09	93.03
41.65- 41.95	8	261	2.79	90.94
41.35- 41.65	16	253	5.57	88.15
41.05- 41.35	10	237	3.48	82.58
40.75- 41.05	17	227	5.92	79.09
40.45- 40.75	18	210	6.27	73.17
40.15- 40.45	18	192	6.27	66.90
39.85- 40.15	18	174	6.27	60.63
39.55- 39.85	12	156	4.18	54.36
39.25- 39.55	12	144	4.18	50.17
38.95- 39.25	17	132	5.92	45.99
38.65- 38.95	16	115	5.57	40.67
38.35- 38.65	21	99	7.32	34.49
38.05- 38.35	12	78	4.18	27.18
37.75- 38.05	10	66	3.48	23.00
37.45- 37.75	14	56	4.88	19.51
37.15- 37.45	2	42	.70	14.63
36.85- 37.15	4	40	1.39	13.94
36.55- 36.85	10	36	3.48	12.54
36.25- 36.55	11	26	3.83	9.06
35.95- 36.25	2	15	.70	5.23
35.65- 35.95	6	13	2.09	4.53
35.35- 35.65	2	7	.70	2.44
35.05- 35.35	1	5	.35	1.74
34.75- 35.05	1	4	.35	1.39
34.45- 34.75	1	3	.35	1.05
34.15- 34.45	1	2	.35	.70
33.85- 34.15	0	1	0.00	.35
33.55- 33.85	1	1	.35	.35

25C SHOULDER CIRCUMFER				
RANGES	FRQ	CUMF	FRQX	CUMFX
129.75-130.75	1	287	.35	100.00
128.75-129.75	1	286	.35	99.65
127.75-128.75	0	285	0.00	99.30
126.75-127.75	0	285	0.00	99.30
125.75-126.75	0	285	0.00	99.30
124.75-125.75	3	285	1.05	99.30
123.75-124.75	2	282	.70	98.26
122.75-123.75	1	280	.35	97.56
121.75-122.75	4	279	1.39	97.21
120.75-121.75	9	275	3.14	95.82
119.75-120.75	2	266	.70	92.68
118.75-119.75	10	264	3.48	91.99
117.75-118.75	9	254	3.14	88.90
116.75-117.75	10	245	3.48	85.37
115.75-116.75	16	235	5.57	81.88
114.75-115.75	6	219	2.09	76.31
113.75-114.75	14	213	4.88	74.22
112.75-113.75	13	199	4.53	69.34
111.75-112.75	15	186	5.23	64.81
110.75-111.75	21	171	7.32	59.58
109.75-110.75	25	150	8.71	52.26
108.75-109.75	13	125	4.53	43.55
107.75-108.75	17	112	5.92	39.02
106.75-107.75	18	95	6.27	33.10
105.75-106.75	21	77	7.32	26.83
104.75-105.75	15	56	5.23	19.51
103.75-104.75	12	41	4.18	14.29
102.75-103.75	7	29	2.44	10.10
101.75-102.75	4	22	1.39	7.67
100.75-101.75	4	18	1.39	6.27
99.75-100.75	7	14	2.44	4.88
98.75- 99.75	5	7	1.74	2.44
97.75- 98.75	0	2	0.00	.70
96.75- 97.75	1	2	.35	.70
95.75- 96.75	0	1	0.00	.35
94.75- 95.75	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

					29C WAIST CIRCUMFERENCE				
					RANGES	FRQ	CUMF	FRQX	CUMFX
					107.75-108.75	1	287	.35	100.00
					106.75-107.75	0	280	0.00	99.65
					105.75-106.75	0	280	0.00	99.65
					104.75-105.75	1	286	.35	99.65
					103.75-104.75	2	265	.70	99.30
					102.75-103.75	0	283	0.00	98.61
					101.75-102.75	1	283	.35	98.61
					100.75-101.75	0	282	0.00	98.26
					99.75-100.75	1	282	.35	98.26
					98.75- 99.75	1	281	.35	97.91
					97.75- 98.75	0	280	0.00	97.56
					96.75- 97.75	1	280	.35	97.56
					95.75- 96.75	1	279	.35	97.21
					94.75- 95.75	4	278	1.39	96.86
					93.75- 94.75	5	274	1.74	95.47
					92.75- 93.75	4	269	1.39	93.73
					91.75- 92.75	6	265	2.09	92.63
					90.75- 91.75	2	259	.70	90.24
					89.75- 90.75	2	257	.70	89.55
					88.75- 89.75	4	255	1.39	88.85
					87.75- 88.75	3	251	1.05	87.46
					86.75- 87.75	3	248	1.05	86.41
					85.75- 86.75	15	245	5.23	85.37
					84.75- 85.75	4	230	1.39	80.14
					83.75- 84.75	4	226	1.39	78.75
					82.75- 83.75	9	222	3.14	77.35
					81.75- 82.75	6	213	2.09	74.22
					80.75- 81.75	7	207	2.44	72.13
					79.75- 80.75	9	200	3.14	69.69
					78.75- 79.75	15	191	5.23	66.55
					77.75- 78.75	13	176	4.53	61.32
					76.75- 77.75	8	163	2.79	55.79
					75.75- 76.75	29	155	10.10	54.01
					74.75- 75.75	22	126	7.67	43.90
					73.75- 74.75	25	104	8.71	36.24
					72.75- 73.75	18	79	6.27	27.53
					71.75- 72.75	11	61	3.83	21.25
					70.75- 71.75	16	50	5.57	17.42
					69.75- 70.75	11	34	3.83	11.85
					68.75- 69.75	5	23	1.74	8.01
					67.75- 68.75	8	18	2.79	6.27
					66.75- 67.75	5	10	1.74	3.48
					65.75- 66.75	3	5	1.05	1.74
					64.75- 65.75	1	2	.35	.70
					63.75- 64.75	0	1	0.00	.35
					62.75- 63.75	1	1	.35	.35
27C CHEST CIRC									
RANGES	FRQ	CUMF	FRQX	CUMFX					
110.75-111.75	3	287	1.35	100.00					
109.75-110.75	1	284	.35	98.95					
108.75-109.75	2	283	.70	98.61					
107.75-108.75	1	281	.35	97.91					
106.75-107.75	3	280	1.05	97.56					
105.75-106.75	4	277	1.39	96.52					
104.75-105.75	2	273	.70	95.12					
103.75-104.75	4	271	1.39	94.43					
102.75-103.75	5	267	1.74	93.03					
101.75-102.75	9	262	3.14	91.29					
100.75-101.75	4	253	1.39	88.15					
99.75-100.75	9	249	3.14	86.76					
98.75- 99.75	9	240	3.14	83.62					
97.75- 98.75	9	231	3.14	80.49					
96.75- 97.75	10	222	3.48	77.35					
95.75- 96.75	12	212	4.18	73.87					
94.75- 95.75	15	200	5.23	69.69					
93.75- 94.75	14	185	4.88	64.46					
92.75- 93.75	12	171	4.18	59.58					
91.75- 92.75	13	159	4.53	55.40					
90.75- 91.75	24	146	8.36	50.87					
89.75- 90.75	15	122	5.23	42.51					
88.75- 89.75	19	107	6.62	37.28					
87.75- 88.75	22	88	7.67	30.66					
86.75- 87.75	12	66	4.18	23.00					
85.75- 86.75	15	54	5.23	18.82					
84.75- 85.75	18	39	6.27	13.59					
83.75- 84.75	10	21	3.46	7.32					
82.75- 83.75	4	11	1.39	3.83					
81.75- 82.75	1	7	.35	2.44					
80.75- 81.75	3	6	1.05	2.09					
79.75- 80.75	1	3	.35	1.05					
78.75- 79.75	1	2	.35	.70					
77.75- 78.75	1	1	.35	.35					

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

19T WAIST C, OMPHALION

RANGES	FRQ	CUMF	FRQX	CUMFX
107.75-108.75	1	287	.35	100.00
106.75-107.75	0	286	0.00	99.65
105.75-106.75	1	286	.35	99.65
104.75-105.75	1	285	.35	99.30
103.75-104.75	1	284	.35	98.95
102.75-103.75	1	283	.35	98.61
101.75-102.75	1	282	.35	98.26
100.75-101.75	0	281	0.00	97.91
99.75-100.75	1	281	.35	97.91
98.75- 99.75	3	280	1.05	97.56
97.75- 98.75	1	277	.35	96.52
96.75- 97.75	0	276	0.00	96.17
95.75- 96.75	4	276	1.39	96.17
94.75- 95.75	4	272	1.39	94.77
93.75- 94.75	0	268	0.00	93.38
92.75- 93.75	3	268	1.05	93.38
91.75- 92.75	6	265	2.09	92.33
90.75- 91.75	3	259	1.05	90.24
89.75- 90.75	3	256	1.05	89.20
88.75- 89.75	1	253	.35	88.15
87.75- 88.75	5	252	1.74	87.80
86.75- 87.75	4	247	1.39	86.06
85.75- 86.75	12	243	4.18	84.67
84.75- 85.75	5	231	1.74	80.49
83.75- 84.75	5	226	1.74	78.75
82.75- 83.75	9	221	3.14	77.00
81.75- 82.75	4	212	1.39	73.87
80.75- 81.75	9	208	3.14	72.47
79.75- 80.75	7	199	2.44	69.34
78.75- 79.75	19	192	6.62	66.90
77.75- 78.75	11	173	3.83	60.28
76.75- 77.75	10	162	3.48	56.45
75.75- 76.75	29	152	10.10	52.96
74.75- 75.75	23	123	8.01	42.86
73.75- 74.75	21	100	7.32	34.84
72.75- 73.75	18	79	6.27	27.53
71.75- 72.75	17	61	5.92	21.25
70.75- 71.75	12	44	4.18	15.33
69.75- 70.75	9	32	3.14	11.15
68.75- 69.75	6	23	2.09	8.01
67.75- 68.75	7	17	2.44	5.92
66.75- 67.75	5	10	1.74	3.48
65.75- 66.75	3	5	1.05	1.74
64.75- 65.75	0	2	0.00	.70
63.75- 64.75	1	2	.35	.70
62.75- 63.75	1	1	.35	.35

30C HIP CIRCUMFERENCE

RANGES	FRQ	CUMF	FRQX	CUMFX
113.75-114.75	1	287	.35	100.00
112.75-113.75	2	286	.70	99.65
111.75-112.75	0	284	0.00	98.95
110.75-111.75	1	284	.35	98.95
109.75-110.75	1	283	.35	98.61
108.75-109.75	3	282	1.05	98.26
107.75-108.75	4	279	1.39	97.21
106.75-107.75	7	275	2.44	95.82
105.75-106.75	1	260	.35	93.38
104.75-105.75	6	267	2.09	93.03
103.75-104.75	5	261	1.74	90.94
102.75-103.75	3	256	1.05	89.20
101.75-102.75	4	253	1.39	88.15
100.75-101.75	12	249	4.18	86.76
99.75-100.75	11	237	3.83	82.58
98.75- 99.75	14	226	4.88	78.75
97.75- 98.75	13	212	4.53	73.87
96.75- 97.75	16	199	5.57	69.34
95.75- 96.75	9	183	3.14	63.76
94.75- 95.75	17	174	5.92	60.63
93.75- 94.75	16	157	5.57	54.70
92.75- 93.75	21	141	7.32	49.13
91.75- 92.75	20	120	6.97	41.81
90.75- 91.75	25	100	8.71	34.84
89.75- 90.75	21	75	7.32	26.13
88.75- 89.75	18	54	6.27	18.82
87.75- 88.75	18	36	6.27	12.54
86.75- 87.75	9	18	3.14	6.27
85.75- 86.75	6	9	2.09	3.14
84.75- 85.75	2	3	.70	1.05
83.75- 84.75	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

23T BICEPS CIR, RELAXED

RANGES	FRQ	CUMF	FRQX	CUMFX
37.75- 38.25	1	287	.35	100.00
37.25- 37.75	0	286	0.00	99.65
36.75- 37.25	0	286	0.00	99.65
36.25- 36.75	0	286	0.00	99.65
35.75- 36.25	2	286	.70	99.65
35.25- 35.75	2	284	.70	98.95
34.75- 35.25	2	282	.70	98.26
34.25- 34.75	3	280	1.05	97.56
33.75- 34.25	1	277	.35	96.52
33.25- 33.75	12	276	4.18	96.17
32.75- 33.25	10	264	3.48	91.99
32.25- 32.75	12	254	4.16	88.50
31.75- 32.25	10	242	3.48	84.32
31.25- 31.75	9	232	3.14	80.84
30.75- 31.25	19	223	6.62	77.70
30.25- 30.75	14	204	4.88	71.08
29.75- 30.25	20	190	6.97	66.20
29.25- 29.75	19	170	6.62	59.23
28.75- 29.25	19	151	6.62	52.61
28.25- 28.75	22	132	7.67	45.99
27.75- 28.25	13	110	4.53	38.33
27.25- 27.75	16	97	5.57	33.80
26.75- 27.25	23	81	6.01	28.22
26.25- 26.75	14	58	4.88	20.21
25.75- 26.25	14	44	4.88	15.33
25.25- 25.75	9	30	3.14	10.45
24.75- 25.25	11	21	3.83	7.32
24.25- 24.75	2	10	.70	3.48
23.75- 24.25	4	8	1.39	2.79
23.25- 23.75	2	4	.70	1.39
22.75- 23.25	1	2	.35	.70
22.25- 22.75	0	1	0.00	.35
21.75- 22.25	1	1	.35	.35

33C BICEPS CIRC, FLEXED

RANGES	FRQ	CUMF	FRQX	CUMFX
38.75- 39.25	1	287	.35	100.00
38.25- 38.75	0	286	0.00	99.65
37.75- 38.25	2	286	.70	99.65
37.25- 37.75	1	284	.35	98.95
36.75- 37.25	2	283	.70	98.61
36.25- 36.75	3	261	1.05	97.91
35.75- 36.25	8	278	2.79	96.86
35.25- 35.75	12	270	4.18	94.08
34.75- 35.25	7	258	2.44	89.90
34.25- 34.75	10	251	3.48	87.46
33.75- 34.25	13	241	4.53	83.97
33.25- 33.75	13	228	4.53	79.44
32.75- 33.25	18	215	6.27	74.91
32.25- 32.75	15	197	5.23	68.64
31.75- 32.25	14	182	4.88	63.41
31.25- 31.75	26	168	9.06	58.54
30.75- 31.25	17	142	5.92	49.48
30.25- 30.75	19	125	6.62	43.55
29.75- 30.25	18	106	6.27	36.93
29.25- 29.75	27	88	9.41	30.66
28.75- 29.25	13	61	4.53	21.25
28.25- 28.75	12	48	4.18	16.72
27.75- 28.25	12	36	4.18	12.54
27.25- 27.75	5	24	1.74	8.36
26.75- 27.25	9	19	3.14	6.62
26.25- 26.75	5	10	1.05	3.48
25.75- 26.25	3	7	1.05	2.44
25.25- 25.75	2	4	.70	1.39
24.75- 25.25	1	2	.35	.70
24.25- 24.75	0	1	0.00	.35
23.75- 24.25	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

RANGES	FRQ	CUMF	FRQX	CUMFX
43.75- 44.25	1	287	.35	100.00
43.25- 43.75	1	286	.35	99.65
42.75- 43.25	1	285	.35	99.30
42.25- 42.75	1	284	.35	98.95
41.75- 42.25	4	283	1.39	98.61
41.25- 41.75	3	279	1.05	97.21
40.75- 41.25	4	276	1.39	96.17
40.25- 40.75	6	272	2.09	94.77
39.75- 40.25	8	266	2.79	92.68
39.25- 39.75	6	258	2.09	89.90
38.75- 39.25	9	252	3.14	87.80
38.25- 38.75	12	243	4.18	84.67
37.75- 38.25	7	231	2.44	83.49
37.25- 37.75	18	224	6.27	78.05
36.75- 37.25	21	206	7.32	71.78
36.25- 36.75	20	185	6.97	64.46
35.75- 36.25	13	165	4.53	57.49
35.25- 35.75	19	152	6.62	52.96
34.75- 35.25	25	133	8.71	46.34
34.25- 34.75	22	108	7.67	37.63
33.75- 34.25	25	86	8.71	29.97
33.25- 33.75	13	61	4.53	21.25
32.75- 33.25	9	48	3.14	16.72
32.25- 32.75	12	39	4.18	13.59
31.75- 32.25	11	27	3.83	9.41
31.25- 31.75	6	16	2.09	5.57
30.75- 31.25	2	10	.70	3.48
30.25- 30.75	3	8	1.05	2.79
29.75- 30.25	1	5	.35	1.74
29.25- 29.75	3	4	1.05	1.39
28.75- 29.25	0	1	0.00	.35
28.25- 28.75	1	1	.35	.35

RANGES	FRQ	CUMF	FRQX	CUMFX
25.95- 26.15	1	287	.35	100.00
25.75- 25.95	1	286	.35	99.65
25.55- 25.75	0	285	0.00	99.30
25.35- 25.55	1	285	.35	99.30
25.15- 25.35	0	284	0.00	98.95
24.95- 25.15	1	284	.35	98.95
24.75- 24.95	0	283	0.00	98.61
24.55- 24.75	1	283	.35	98.61
24.35- 24.55	2	282	.70	98.26
24.15- 24.35	2	280	.70	97.56
23.95- 24.15	9	278	3.14	96.86
23.75- 23.95	6	269	2.09	93.73
23.55- 23.75	1	263	.35	91.64
23.35- 23.55	10	262	3.48	91.29
23.15- 23.35	10	252	3.48	87.80
22.95- 23.15	15	242	5.23	84.32
22.75- 22.95	12	227	4.18	79.09
22.55- 22.75	12	215	4.18	74.91
22.35- 22.55	16	203	5.57	70.73
22.15- 22.35	11	187	3.83	65.16
21.95- 22.15	17	176	5.92	61.32
21.75- 21.95	5	159	1.74	55.40
21.55- 21.75	13	154	4.53	53.66
21.35- 21.55	24	141	8.36	49.13
21.15- 21.35	10	117	3.48	40.77
20.95- 21.15	19	107	6.62	37.28
20.75- 20.95	15	88	5.23	30.66
20.55- 20.75	6	73	2.09	25.44
20.35- 20.55	15	67	5.23	23.34
20.15- 20.35	10	52	3.48	18.12
19.95- 20.15	10	42	3.48	14.63
19.75- 19.95	13	32	4.53	11.15
19.55- 19.75	1	19	.35	6.62
19.35- 19.55	7	18	2.44	6.27
19.15- 19.35	1	11	.35	3.83
18.95- 19.15	3	10	1.05	3.48
18.75- 18.95	3	7	1.05	2.44
18.55- 18.75	2	4	.70	1.59
18.35- 18.55	1	2	.35	.70
18.15- 18.35	0	1	0.00	.35
17.95- 18.15	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

420 INTERSCYE, BACK				
RANGES	FRQ	CUMF	FRQX	CUMFX
47.75- 48.25	1	287	.35	100.00
47.25- 47.75	5	286	1.74	99.65
46.75- 47.25	3	281	1.05	97.91
46.25- 46.75	3	278	1.05	96.86
45.75- 46.25	1	275	.35	95.82
45.25- 45.75	5	274	1.74	95.47
44.75- 45.25	8	269	2.79	93.73
44.25- 44.75	11	261	3.83	90.94
43.75- 44.25	13	250	4.53	87.11
43.25- 43.75	14	237	4.88	82.58
42.75- 43.25	17	223	5.92	77.70
42.25- 42.75	13	206	4.53	71.78
41.75- 42.25	15	193	5.23	67.25
41.25- 41.75	27	178	9.41	62.02
40.75- 41.25	15	151	5.23	52.61
40.25- 40.75	20	136	6.97	47.39
39.75- 40.25	21	110	7.32	40.42
39.25- 39.75	20	95	6.97	33.10
38.75- 39.25	16	75	5.57	26.13
38.25- 38.75	12	59	4.18	20.56
37.75- 38.25	12	47	4.16	16.38
37.25- 37.75	9	35	3.14	12.20
36.75- 37.25	6	26	2.09	9.06
36.25- 36.75	8	20	2.79	6.97
35.75- 36.25	3	12	1.05	4.18
35.25- 35.75	5	9	1.74	3.14
34.75- 35.25	0	4	0.00	1.39
34.25- 34.75	2	4	.70	1.39
33.75- 34.25	0	2	0.00	.70
33.25- 33.75	1	2	.35	.70
32.75- 33.25	1	1	.35	.35

430 INTERSCYE, FRONT				
RANGES	FRQ	CUMF	FRQX	CUMFX
41.15- 41.35	3	287	1.05	100.00
40.95- 41.15	5	284	1.74	98.95
40.75- 40.95	0	279	0.00	97.21
40.55- 40.75	4	279	1.39	97.21
40.35- 40.55	0	275	0.00	95.82
40.15- 40.35	2	275	.70	95.82
39.95- 40.15	2	273	.70	95.12
39.75- 39.95	2	271	.70	94.43
39.55- 39.75	5	269	1.74	93.73
39.35- 39.55	2	264	.70	91.99
39.15- 39.35	4	262	1.39	91.29
38.95- 39.15	7	258	2.44	89.90
38.75- 38.95	4	251	1.39	87.46
38.55- 38.75	7	247	2.44	86.06
38.35- 38.55	11	240	3.83	83.62
38.15- 38.35	8	229	2.79	79.79
37.95- 38.15	6	221	2.09	77.00
37.75- 37.95	12	215	4.18	74.91
37.55- 37.75	11	203	3.83	70.73
37.35- 37.55	17	192	5.92	66.90
37.15- 37.35	2	175	.70	60.98
36.95- 37.15	11	173	3.83	60.28
36.75- 36.95	7	162	2.44	56.45
36.55- 36.75	10	155	3.48	54.01
36.35- 36.55	15	145	5.23	50.52
36.15- 36.35	15	130	5.23	45.30
35.95- 36.15	10	115	3.48	40.07
35.75- 35.95	9	105	3.14	36.59
35.55- 35.75	12	96	4.18	33.45
35.35- 35.55	10	84	3.48	29.27
35.15- 35.35	12	74	4.18	25.78
34.95- 35.15	6	62	2.09	21.60
34.75- 34.95	8	56	2.79	19.51
34.55- 34.75	8	48	2.79	16.72
34.35- 34.55	7	40	2.44	13.94
34.15- 34.35	8	33	2.79	11.50
33.95- 34.15	3	25	1.05	8.71
33.75- 33.95	4	22	1.39	7.67
33.55- 33.75	1	18	.35	6.27
33.35- 33.55	2	17	.70	5.92
33.15- 33.35	3	15	1.05	5.23
32.95- 33.15	4	12	1.39	4.18
32.75- 32.95	3	8	1.05	2.79
32.55- 32.75	1	5	.35	1.74
32.35- 32.55	2	4	.70	1.39
32.15- 32.35	0	2	0.00	.70
31.95- 32.15	1	2	.35	.70
31.75- 31.95	0	1	0.00	.35
31.55- 31.75	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

44C BACK CURV'URE-CHST					
RANGES	FRQ	CUMF	FRQX	CUMFX	
54.25- 54.75	2	287	.70	100.00	
53.75- 54.25	2	285	.70	99.30	
53.25- 53.75	1	283	.35	98.61	
52.75- 53.25	1	282	.35	98.26	
52.25- 52.75	3	281	1.05	97.91	
51.75- 52.25	4	278	1.39	96.86	
51.25- 51.75	4	274	1.39	95.47	
50.75- 51.25	6	270	2.09	94.08	
50.25- 50.75	4	264	1.39	91.99	
49.75- 50.25	3	260	1.05	90.59	
49.25- 49.75	8	257	2.79	89.55	
48.75- 49.25	11	249	3.83	86.76	
48.25- 48.75	6	238	2.09	82.93	
47.75- 48.25	11	232	3.83	80.84	
47.25- 47.75	8	221	2.79	77.00	
46.75- 47.25	11	213	3.83	74.22	
46.25- 46.75	9	202	3.14	70.38	
45.75- 46.25	14	193	4.88	67.25	
45.25- 45.75	17	179	5.92	62.37	
44.75- 45.25	13	162	4.53	56.45	
44.25- 44.75	17	149	5.92	51.92	
43.75- 44.25	22	132	7.67	45.99	
43.25- 43.75	8	110	2.79	38.33	
42.75- 43.25	24	102	8.36	35.54	
42.25- 42.75	22	78	7.67	27.18	
41.75- 42.25	20	56	6.97	19.51	
41.25- 41.75	8	36	2.79	12.54	
40.75- 41.25	11	28	3.83	9.76	
40.25- 40.75	4	17	1.39	5.92	
39.75- 40.25	8	13	2.79	4.53	
39.25- 39.75	3	5	1.05	1.74	
38.75- 39.25	0	2	0.00	.70	
38.25- 38.75	1	2	.35	.70	
37.75- 38.25	1	1	.35	.35	

45C BACK CURV'KE-WAIST					
RANGES	FRQ	CUMF	FRQX	CUMFX	
56.75- 57.75	1	287	.35	100.00	
55.75- 56.75	1	286	.35	99.65	
54.75- 55.75	0	285	.00	99.30	
53.75- 54.75	1	285	.35	99.30	
52.75- 53.75	1	284	.35	98.95	
51.75- 52.75	0	283	0.00	98.61	
50.75- 51.75	0	283	0.00	98.61	
49.75- 50.75	0	283	0.00	98.61	
48.75- 49.75	4	283	1.39	98.61	
47.75- 48.75	3	279	1.05	97.21	
46.75- 47.75	6	276	2.09	96.17	
45.75- 46.75	6	270	2.09	94.08	
44.75- 45.75	6	264	2.09	91.99	
43.75- 44.75	10	258	3.48	89.90	
42.75- 43.75	13	248	4.53	86.41	
41.75- 42.75	11	235	3.83	81.88	
40.75- 41.75	16	224	5.57	78.05	
39.75- 40.75	18	208	6.27	72.47	
38.75- 39.75	20	190	6.97	66.20	
37.75- 38.75	30	170	10.45	59.23	
36.75- 37.75	43	140	14.98	48.78	
35.75- 36.75	42	97	14.63	33.80	
34.75- 35.75	21	55	7.32	19.16	
33.75- 34.75	20	34	6.97	11.85	
32.75- 33.75	5	14	1.74	4.88	
31.75- 32.75	7	9	2.44	3.14	
30.75- 31.75	2	2	.70	.70	

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

46C BACK CURVATURE-HIP

RANGES	FRQ	CUMF	FRQZ	CUMFZ
58.25- 58.75	1	287	.35	100.00
57.75- 58.25	0	286	0.00	99.65
57.25- 57.75	0	286	0.00	99.65
56.75- 57.25	0	286	0.00	99.65
56.25- 56.75	0	286	0.00	99.65
55.75- 56.25	0	286	0.00	99.65
55.25- 55.75	1	286	.35	99.65
54.75- 55.25	2	285	.70	99.30
54.25- 54.75	0	283	0.00	98.61
53.75- 54.25	2	283	.70	98.61
53.25- 53.75	5	281	1.74	97.91
52.75- 53.25	2	276	.70	96.17
52.25- 52.75	2	274	.70	95.47
51.75- 52.25	4	272	1.39	94.77
51.25- 51.75	6	268	2.09	93.38
50.75- 51.25	6	262	2.09	91.29
50.25- 50.75	7	256	2.44	89.20
49.75- 50.25	8	249	2.79	86.76
49.25- 49.75	11	241	3.83	83.97
48.75- 49.25	13	230	4.53	80.14
48.25- 48.75	12	217	4.18	75.61
47.75- 48.25	10	205	3.48	71.43
47.25- 47.75	10	195	3.46	67.94
46.75- 47.25	17	185	5.92	64.46
46.25- 46.75	16	168	5.57	58.54
45.75- 46.25	14	132	4.88	52.96
45.25- 45.75	16	136	5.57	48.08
44.75- 45.25	24	122	8.36	42.51
44.25- 44.75	28	98	9.76	34.15
43.75- 44.25	20	70	6.97	24.39
43.25- 43.75	18	50	6.27	17.42
42.75- 43.25	11	32	3.83	11.15
42.25- 42.75	10	21	3.48	7.32
41.75- 42.25	4	11	1.39	3.83
41.25- 41.75	5	7	1.74	2.44
40.75- 41.25	1	2	.35	.70
40.25- 40.75	0	1	0.00	.35
39.75- 40.25	0	1	0.00	.35
39.25- 39.75	1	1	.35	.35

47C WAIST BACK LENGTH

RANGES	FRQ	CUMF	FRQZ	CUMFZ
52.75- 53.25	2	267	.70	100.00
52.25- 52.75	0	285	0.00	99.30
51.75- 52.25	4	285	1.39	99.30
51.25- 51.75	2	281	.70	97.91
50.75- 51.25	4	279	1.39	97.21
50.25- 50.75	5	275	1.74	95.82
49.75- 50.25	7	270	2.44	94.08
49.25- 49.75	3	263	1.05	91.64
48.75- 49.25	7	266	2.44	90.59
48.25- 48.75	7	253	2.44	88.15
47.75- 48.25	13	246	4.53	85.71
47.25- 47.75	15	233	5.23	81.18
46.75- 47.25	11	218	3.83	75.96
46.25- 46.75	17	207	5.92	72.13
45.75- 46.25	11	190	3.83	66.20
45.25- 45.75	22	179	7.67	62.37
44.75- 45.25	20	157	6.97	54.70
44.25- 44.75	14	137	4.88	47.74
43.75- 44.25	14	123	4.88	42.86
43.25- 43.75	19	109	6.62	37.98
42.75- 43.25	19	90	6.62	31.36
42.25- 42.75	16	71	5.57	24.74
41.75- 42.25	11	55	3.83	19.16
41.25- 41.75	4	44	1.39	15.33
40.75- 41.25	9	40	3.14	13.94
40.25- 40.75	6	31	2.09	10.80
39.75- 40.25	6	25	2.09	8.71
39.25- 39.75	7	19	2.44	6.62
38.75- 39.25	4	12	1.39	4.18
38.25- 38.75	3	8	1.05	2.79
37.75- 38.25	4	5	1.39	1.74
37.25- 37.75	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

48C WAIST FRONT LENGTH				
RANGES	FRQ	CUMF	FRQX	CUMFX
48.75- 49.25	1	287	.35	100.00
48.25- 48.75	0	286	0.00	99.65
47.75- 48.25	3	286	1.05	99.05
47.25- 47.75	2	283	.70	98.61
46.75- 47.25	6	281	2.09	97.91
46.25- 46.75	3	275	1.05	95.82
45.75- 46.25	4	272	1.39	94.77
45.25- 45.75	9	268	3.14	93.38
44.75- 45.25	4	259	1.39	90.24
44.25- 44.75	10	255	3.48	88.85
43.75- 44.25	13	245	4.53	85.37
43.25- 43.75	11	232	3.83	80.84
42.75- 43.25	15	221	5.23	77.00
42.25- 42.75	12	206	4.18	71.78
41.75- 42.25	20	194	6.97	67.60
41.25- 41.75	16	174	5.57	60.03
40.75- 41.25	25	158	8.71	55.05
40.25- 40.75	19	133	6.62	46.34
39.75- 40.25	19	114	6.62	39.72
39.25- 39.75	15	95	5.23	33.10
38.75- 39.25	12	80	4.18	27.87
38.25- 38.75	22	68	7.67	23.69
37.75- 38.25	9	46	3.14	16.03
37.25- 37.75	10	37	3.48	12.89
36.75- 37.25	4	27	1.39	9.41
36.25- 36.75	5	23	1.74	8.01
35.75- 36.25	5	18	1.74	6.27
35.25- 35.75	2	13	.70	4.53
34.75- 35.25	5	11	1.74	3.83
34.25- 34.75	4	6	1.39	2.09
33.75- 34.25	0	2	0.00	.70
33.25- 33.75	0	2	0.00	.70
32.75- 33.25	0	2	0.00	.70
32.25- 32.75	2	2	.70	.70

51C SLEEVE INSEAM LGTH				
RANGES	FRQ	CUMF	FRQX	CUMFX
56.25- 56.75	1	287	.35	100.00
55.75- 56.25	0	286	0.00	99.65
55.25- 55.75	0	286	0.00	99.65
54.75- 55.25	2	286	.70	99.65
54.25- 54.75	2	284	.70	98.95
53.75- 54.25	2	282	.70	98.26
53.25- 53.75	5	280	1.74	97.56
52.75- 53.25	4	275	1.39	95.82
52.25- 52.75	4	271	1.39	94.43
51.75- 52.25	12	267	4.18	93.03
51.25- 51.75	4	255	1.39	88.85
50.75- 51.25	16	251	5.57	87.46
50.25- 50.75	16	235	5.57	81.88
49.75- 50.25	10	219	3.48	76.31
49.25- 49.75	19	209	6.62	72.82
48.75- 49.25	22	190	7.67	66.20
48.25- 48.75	25	168	8.71	58.54
47.75- 48.25	18	143	6.27	49.83
47.25- 47.75	22	125	7.67	43.55
46.75- 47.25	19	103	6.62	35.89
46.25- 46.75	18	84	6.27	29.27
45.75- 46.25	16	66	5.57	23.00
45.25- 45.75	15	50	5.23	17.42
44.75- 45.25	12	35	4.18	12.20
44.25- 44.75	6	23	2.09	8.01
43.75- 44.25	4	17	1.39	5.92
43.25- 43.75	3	13	1.05	4.53
42.75- 43.25	4	10	1.39	3.48
42.25- 42.75	3	6	1.05	2.09
41.75- 42.25	0	3	0.00	1.05
41.25- 41.75	1	3	.35	1.05
40.75- 41.25	0	2	0.00	.70
40.25- 40.75	0	2	0.00	.70
39.75- 40.25	1	2	.35	.70
39.25- 39.75	0	1	0.00	.35
38.75- 39.25	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

52C SLEEVE OUTSEAM LTH				
RANGES	FRQ	CUMF	FRQX	CUMFX
66.75- 67.25	1	287	.35	100.00
66.25- 66.75	1	286	.35	99.65
65.75- 66.25	5	285	1.74	99.30
65.25- 65.75	2	280	.70	97.56
64.75- 65.25	3	278	1.05	96.86
64.25- 64.75	3	275	1.05	95.82
63.75- 64.25	4	272	1.39	94.77
63.25- 63.75	5	268	1.74	93.38
62.75- 63.25	11	263	3.83	91.64
62.25- 62.75	8	252	2.79	87.80
61.75- 62.25	8	244	2.79	85.02
61.25- 61.75	11	236	3.83	82.23
60.75- 61.25	20	225	6.97	78.40
60.25- 60.75	13	205	4.53	71.43
59.75- 60.25	12	192	4.18	66.90
59.25- 59.75	15	180	5.23	62.72
58.75- 59.25	13	165	4.53	57.49
58.25- 58.75	15	152	5.23	52.96
57.75- 58.25	20	137	6.97	47.74
57.25- 57.75	19	117	6.62	40.77
56.75- 57.25	21	98	7.32	34.15
56.25- 56.75	15	77	5.23	26.83
55.75- 56.25	19	62	6.62	21.60
55.25- 55.75	7	43	2.44	14.98
54.75- 55.25	14	36	4.88	12.54
54.25- 54.75	4	22	1.39	7.67
53.75- 54.25	4	18	1.39	6.27
53.25- 53.75	3	14	1.05	4.88
52.75- 53.25	0	11	0.00	3.83
52.25- 52.75	6	11	2.09	3.83
51.75- 52.25	1	5	.35	1.74
51.25- 51.75	1	4	.35	1.39
50.75- 51.25	1	3	.35	1.05
50.25- 50.75	1	2	.35	.70
49.75- 50.25	0	1	0.00	.35
49.25- 49.75	0	1	0.00	.35
48.75- 49.25	0	1	0.00	.35
48.25- 48.75	0	1	0.00	.35
47.75- 48.25	0	1	0.00	.35
47.25- 47.75	1	1	.35	.35

54C HEAD CIRCUMFERENCE				
RANGES	FRQ	CUMF	FRQX	CUMFX
60.15- 60.35	1	287	.35	100.00
59.95- 60.15	1	286	.35	99.65
59.75- 59.95	0	285	0.00	99.30
59.55- 59.75	2	285	.70	99.30
59.35- 59.55	1	283	.35	98.61
59.15- 59.35	1	282	.35	98.26
58.95- 59.15	3	281	1.05	97.91
58.75- 58.95	5	278	1.74	96.86
58.55- 58.75	4	273	1.39	95.12
58.35- 58.55	5	269	1.74	93.73
58.15- 58.35	5	264	1.74	91.99
57.95- 58.15	5	259	1.74	90.24
57.75- 57.95	5	254	1.74	88.50
57.55- 57.75	7	249	2.44	86.76
57.35- 57.55	11	242	3.83	84.32
57.15- 57.35	11	231	3.83	80.49
56.95- 57.15	14	220	4.88	76.66
56.75- 56.95	11	206	3.83	71.78
56.55- 56.75	10	195	3.48	67.94
56.35- 56.55	19	185	6.62	64.46
56.15- 56.35	14	160	4.88	57.84
55.95- 56.15	16	152	5.57	52.96
55.75- 55.95	9	136	3.14	47.39
55.55- 55.75	17	127	5.92	44.25
55.35- 55.55	20	110	6.97	38.33
55.15- 55.35	12	90	4.18	31.36
54.95- 55.15	10	78	3.48	27.18
54.75- 54.95	7	68	2.44	23.69
54.55- 54.75	11	61	3.83	21.25
54.35- 54.55	8	50	2.79	17.42
54.15- 54.35	7	42	2.44	14.63
53.95- 54.15	9	35	3.14	12.20
53.75- 53.95	1	26	.35	9.06
53.55- 53.75	0	25	0.00	8.71
53.35- 53.55	5	25	1.74	8.71
53.15- 53.35	0	20	2.09	6.97
52.95- 53.15	3	14	1.05	4.88
52.75- 52.95	0	11	0.00	3.83
52.55- 52.75	2	11	.70	3.83
52.35- 52.55	3	9	1.05	3.14
52.15- 52.35	2	6	.70	2.09
51.95- 52.15	1	4	.35	1.39
51.75- 51.95	2	3	.70	1.05
51.55- 51.75	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

55C HEAD BREADTH					
RANGES	FRQ	CUMF	FRQX	CUMFX	
16.65- 16.75	1	287	.35	100.00	
16.55- 16.65	0	286	0.00	99.65	
16.45- 16.55	3	286	1.05	99.65	
16.35- 16.45	2	283	.70	98.61	
16.25- 16.35	0	281	0.00	97.91	
16.15- 16.25	2	281	.70	97.91	
16.05- 16.15	1	279	.35	97.21	
15.95- 16.05	4	278	1.39	96.86	
15.85- 15.95	3	274	1.05	95.47	
15.75- 15.85	8	271	2.79	94.43	
15.65- 15.75	12	263	4.18	91.64	
15.55- 15.65	21	251	7.32	87.46	
15.45- 15.55	13	230	4.53	80.14	
15.35- 15.45	11	217	3.83	75.61	
15.25- 15.35	13	206	4.53	71.78	
15.15- 15.25	22	193	7.67	67.25	
15.05- 15.15	31	171	10.80	59.58	
14.95- 15.05	23	140	8.01	48.78	
14.85- 14.95	16	117	5.57	40.77	
14.75- 14.85	16	101	5.57	35.19	
14.65- 14.75	23	85	8.01	29.62	
14.55- 14.65	12	62	4.18	21.60	
14.45- 14.55	13	50	4.53	17.42	
14.35- 14.45	9	37	3.14	12.89	
14.25- 14.35	6	28	2.09	9.76	
14.15- 14.25	7	22	2.44	7.67	
14.05- 14.15	9	15	3.14	5.23	
13.95- 14.05	2	6	.70	2.09	
13.85- 13.95	2	4	.70	1.39	
13.75- 13.85	1	2	.35	.70	
13.65- 13.75	1	1	.35	.35	

56C HEAD LENGTH					
RANGES	FRQ	CUMF	FRQX	CUMFX	
21.35- 21.45	1	287	.35	100.00	
21.25- 21.35	2	286	.70	99.65	
21.15- 21.25	0	284	0.00	98.95	
21.05- 21.15	0	284	0.00	98.95	
20.95- 21.05	2	284	.70	98.95	
20.85- 20.95	1	282	.35	98.26	
20.75- 20.85	4	281	1.39	97.91	
20.65- 20.75	3	277	1.05	96.52	
20.55- 20.65	4	274	1.39	95.47	
20.45- 20.55	11	270	3.83	94.08	
20.35- 20.45	7	259	2.44	90.24	
20.25- 20.35	4	252	1.39	87.80	
20.15- 20.25	9	248	3.14	86.41	
20.05- 20.15	9	239	3.14	83.28	
19.95- 20.05	8	230	2.79	80.14	
19.85- 19.95	11	222	3.83	77.35	
19.75- 19.85	13	211	4.53	73.52	
19.65- 19.75	13	198	4.53	68.99	
19.55- 19.65	16	185	5.57	64.46	
19.45- 19.55	30	169	10.45	58.89	
19.35- 19.45	16	139	5.57	48.43	
19.25- 19.35	18	123	6.27	42.86	
19.15- 19.25	23	105	8.01	36.59	
19.05- 19.15	14	82	4.88	28.57	
18.95- 19.05	13	68	4.53	23.69	
18.85- 18.95	8	55	2.79	19.16	
18.75- 18.85	9	47	3.14	16.38	
18.65- 18.75	7	38	2.44	13.24	
18.55- 18.65	7	31	2.44	10.80	
18.45- 18.55	4	24	1.39	8.36	
18.35- 18.45	1	20	.35	6.97	
18.25- 18.35	7	19	2.44	6.62	
18.15- 18.25	0	12	0.00	4.18	
18.05- 18.15	4	12	1.39	4.18	
17.95- 18.05	2	8	.70	2.79	
17.85- 17.95	1	6	.35	2.09	
17.75- 17.85	2	5	.70	1.74	
17.65- 17.75	0	3	0.00	1.05	
17.55- 17.65	1	3	.35	1.05	
17.45- 17.55	1	2	.35	.70	
17.35- 17.45	0	1	0.00	.35	
17.25- 17.35	0	1	0.00	.35	
17.15- 17.25	0	1	0.00	.35	
17.05- 17.15	0	1	0.00	.35	
16.95- 17.05	0	1	0.00	.35	
16.85- 16.95	0	1	0.00	.35	
16.75- 16.85	1	1	.35	.35	

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

57C PALM LENGTH					
RANGES	FRQ	CUMF	FRQX	CUMFX	
12.05- 12.15	2	287	.70	100.00	
11.95- 12.05	3	285	1.05	99.30	
11.85- 11.95	4	282	1.39	98.26	
11.75- 11.85	7	278	2.44	96.86	
11.65- 11.75	4	271	1.39	94.43	
11.55- 11.65	5	267	1.74	93.03	
11.45- 11.55	6	262	2.09	91.29	
11.35- 11.45	7	256	2.44	89.20	
11.25- 11.35	14	249	4.88	86.76	
11.15- 11.25	12	235	4.18	81.88	
11.05- 11.15	31	223	10.80	77.70	
10.95- 11.05	16	192	5.57	66.90	
10.85- 10.95	16	176	5.57	61.32	
10.75- 10.85	21	160	7.32	55.75	
10.65- 10.75	18	139	6.27	48.43	
10.55- 10.65	17	121	5.92	42.16	
10.45- 10.55	19	104	6.62	36.24	
10.35- 10.45	13	85	4.53	29.62	
10.25- 10.35	13	72	4.53	25.09	
10.15- 10.25	13	59	4.53	20.56	
10.05- 10.15	13	46	4.53	16.03	
9.95- 10.05	5	33	1.74	11.50	
9.85- 9.95	12	28	4.18	9.76	
9.75- 9.85	6	16	2.09	5.57	
9.65- 9.75	3	10	1.05	3.48	
9.55- 9.65	2	7	.70	2.44	
9.45- 9.55	1	5	.35	1.74	
9.35- 9.45	1	4	.35	1.39	
9.25- 9.35	1	3	.35	1.05	
9.15- 9.25	0	2	0.00	.70	
9.05- 9.15	1	2	.35	.70	
8.95- 9.05	1	1	.35	.35	

58C HAND BREADTH					
RANGES	FRQ	CUMF	FRQX	CUMFX	
9.95- 10.05	1	287	.35	100.00	
9.85- 9.95	1	286	.35	99.65	
9.75- 9.85	7	285	2.44	99.30	
9.65- 9.75	7	278	2.44	96.86	
9.55- 9.65	7	271	2.44	94.43	
9.45- 9.55	13	264	4.53	91.99	
9.35- 9.45	11	251	3.83	87.46	
9.25- 9.35	19	240	6.62	83.62	
9.15- 9.25	19	221	6.62	77.00	
9.05- 9.15	26	202	9.06	70.38	
8.95- 9.05	23	176	8.01	61.32	
8.85- 8.95	29	153	10.10	53.31	
8.75- 8.85	18	124	6.27	43.21	
8.65- 8.75	25	106	8.71	36.93	
8.55- 8.65	27	81	9.41	28.22	
8.45- 8.55	16	54	5.57	18.82	
8.35- 8.45	11	38	3.83	13.24	
8.25- 8.35	11	27	3.83	9.41	
8.15- 8.25	10	16	3.48	5.57	
8.05- 8.15	1	6	.35	2.09	
7.95- 8.05	1	5	.35	1.74	
7.85- 7.95	2	4	.70	1.39	
7.75- 7.85	2	2	.70	.70	

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

59C HAND CIRCUMFERENCE				
RANGES	FRQ	CUMF	FRQ%	CUMF%
23.95- 24.15	1	287	.35	100.00
23.75- 23.95	1	286	.35	99.65
23.55- 23.75	1	285	.35	99.30
23.35- 23.55	1	284	.35	98.95
23.15- 23.35	2	283	.70	98.61
22.95- 23.15	5	281	1.74	97.91
22.75- 22.95	6	276	2.09	96.17
22.55- 22.75	6	270	2.09	94.08
22.35- 22.55	8	264	2.79	91.99
22.15- 22.35	8	256	2.79	89.20
21.95- 22.15	20	248	6.97	86.41
21.75- 21.95	16	228	5.57	79.44
21.55- 21.75	16	212	5.57	73.87
21.35- 21.55	29	196	10.10	68.29
21.15- 21.35	15	167	5.23	58.19
20.95- 21.15	29	152	10.10	52.96
20.75- 20.95	18	123	6.27	42.86
20.55- 20.75	17	105	5.92	36.59
20.35- 20.55	23	58	8.01	30.66
20.15- 20.35	11	65	3.83	22.65
19.95- 20.15	24	54	8.36	18.82
19.75- 19.95	7	30	2.44	10.45
19.55- 19.75	10	23	3.48	8.01
19.35- 19.55	6	13	2.09	4.53
19.15- 19.35	1	7	.35	2.44
18.95- 19.15	2	6	.70	2.09
18.75- 18.95	1	4	.35	1.39
18.55- 18.75	1	3	.35	1.05
18.35- 18.55	1	2	.35	.70
18.15- 18.35	0	1	0.00	.35
17.95- 18.15	1	1	.35	.35

60C HAND LENGTH				
RANGES	FRQ	CUMF	FRQ%	CUMF%
21.55- 21.75	1	287	.35	100.00
21.35- 21.55	0	286	0.00	99.65
21.15- 21.35	1	286	.35	99.65
20.95- 21.15	2	285	.70	99.30
20.75- 20.95	4	283	1.39	98.61
20.55- 20.75	10	279	3.48	97.21
20.35- 20.55	7	269	2.44	93.73
20.15- 20.35	11	262	3.83	91.29
19.95- 20.15	15	251	5.23	87.46
19.75- 19.95	12	236	4.18	82.23
19.55- 19.75	22	224	7.67	78.05
19.35- 19.55	24	202	8.36	70.38
19.15- 19.35	29	178	10.10	62.02
18.95- 19.15	18	149	6.27	51.92
18.75- 18.95	17	131	5.92	45.64
18.55- 18.75	24	114	8.36	39.72
18.35- 18.55	11	90	3.83	31.36
18.15- 18.35	13	79	4.53	27.53
17.95- 18.15	21	66	7.32	23.00
17.75- 17.95	15	45	5.23	15.68
17.55- 17.75	8	30	2.79	10.45
17.35- 17.55	12	22	4.18	7.67
17.15- 17.35	4	16	1.39	3.48
16.95- 17.15	2	6	.70	2.09
16.75- 16.95	0	4	0.00	1.39
16.55- 16.75	1	4	.35	1.39
16.35- 16.55	1	3	.35	1.05
16.15- 16.35	1	2	.35	.70
15.95- 16.15	0	1	0.00	.35
15.75- 15.95	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

61C INSTEP LENGTH				
RANGES	FRQ	CUMF	FRQX	CUMFX
22.95- 23.15	1	286	.35	100.00
22.75- 22.95	0	285	0.00	99.65
22.55- 22.75	1	285	.35	99.65
22.35- 22.55	1	284	.35	99.30
22.15- 22.35	4	283	1.40	98.95
21.95- 22.15	2	279	.70	97.55
21.75- 21.95	3	277	1.05	96.85
21.55- 21.75	5	274	1.75	95.80
21.35- 21.55	8	269	2.80	94.06
21.15- 21.35	10	261	3.50	91.26
20.95- 21.15	11	251	3.85	87.76
20.75- 20.95	8	240	2.80	83.92
20.55- 20.75	5	232	1.75	81.12
20.35- 20.55	21	227	7.34	79.37
20.15- 20.35	20	206	6.99	72.03
19.95- 20.15	19	186	6.64	65.03
19.75- 19.95	23	167	8.04	58.39
19.55- 19.75	14	144	4.90	50.35
19.35- 19.55	23	130	8.04	45.45
19.15- 19.35	17	107	5.94	37.41
18.95- 19.15	19	90	6.64	31.47
18.75- 18.95	10	71	3.50	24.83
18.55- 18.75	15	61	5.24	21.33
18.35- 18.55	12	46	4.20	16.08
18.15- 18.35	6	34	2.10	11.89
17.95- 18.15	6	28	2.10	9.79
17.75- 17.95	3	22	1.05	7.69
17.55- 17.75	8	19	2.80	6.64
17.35- 17.55	3	11	1.05	3.85
17.15- 17.35	3	8	1.05	2.80
16.95- 17.15	3	5	1.05	1.75
16.75- 16.95	2	2	.70	.70

62C FOOT LENGTH				
RANGES	FRQ	CUMF	FRQX	CUMFX
29.55- 29.75	3	286	1.05	100.00
29.35- 29.55	4	283	1.40	98.95
29.15- 29.35	1	279	.35	97.55
28.95- 29.15	7	278	2.45	97.20
28.75- 28.95	8	271	2.80	94.76
28.55- 28.75	2	263	.70	91.96
28.35- 28.55	11	261	3.85	91.26
28.15- 28.35	8	250	2.80	87.41
27.95- 28.15	14	242	4.90	84.62
27.75- 27.95	11	228	3.85	79.72
27.55- 27.75	7	217	2.45	75.87
27.35- 27.55	18	210	6.29	73.43
27.15- 27.35	19	192	6.64	67.13
26.95- 27.15	23	173	8.04	60.49
26.75- 26.95	11	150	3.85	52.45
26.55- 26.75	10	139	3.50	48.60
26.35- 26.55	19	129	6.64	45.10
26.15- 26.35	14	110	4.90	38.46
25.95- 26.15	18	96	6.29	33.57
25.75- 25.95	16	78	5.59	27.27
25.55- 25.75	9	62	3.15	21.68
25.35- 25.55	13	53	4.55	18.53
25.15- 25.35	5	40	1.75	13.99
24.95- 25.15	11	35	3.85	12.24
24.75- 24.95	5	24	1.75	8.39
24.55- 24.75	2	19	.70	6.64
24.35- 24.55	6	17	2.10	5.94
24.15- 24.35	2	11	.70	3.85
23.95- 24.15	4	9	1.40	3.15
23.75- 23.95	0	5	0.00	1.75
23.55- 23.75	2	5	.70	1.75
23.35- 23.55	2	3	.70	1.05
23.15- 23.35	0	1	0.00	.35
22.95- 23.15	0	1	0.00	.35
22.75- 22.95	0	1	0.00	.35
22.55- 22.75	0	1	0.00	.35
22.35- 22.55	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

63C HEEL-ANKLE CIRCUMF				
RANGES	FRQ	CUMF	FRQX	CUMFX
38.95- 39.25	1	287	.35	100.00
38.65- 38.95	0	286	0.00	99.65
38.35- 38.65	1	286	.35	99.65
38.05- 38.35	0	285	0.00	99.30
37.75- 38.05	3	285	1.05	99.30
37.45- 37.75	4	282	1.39	98.26
37.15- 37.45	3	278	1.05	96.86
36.85- 37.15	9	275	3.14	95.82
36.55- 36.85	5	266	1.74	92.68
36.25- 36.55	6	261	2.09	90.94
35.95- 36.25	6	255	2.09	88.85
35.65- 35.95	13	249	4.53	86.76
35.35- 35.65	15	236	5.23	82.23
35.05- 35.35	7	221	2.44	77.00
34.75- 35.05	16	214	5.57	74.56
34.45- 34.75	18	198	6.27	68.99
34.15- 34.45	21	180	7.32	62.72
33.85- 34.15	23	159	8.01	55.40
33.55- 33.85	18	136	6.27	47.39
33.25- 33.55	24	118	8.36	41.11
32.95- 33.25	19	94	6.62	32.75
32.65- 32.95	16	75	5.57	26.13
32.35- 32.65	16	59	5.57	20.56
32.05- 32.35	13	43	4.53	14.98
31.75- 32.05	6	30	2.09	10.45
31.45- 31.75	4	24	1.39	8.36
31.15- 31.45	5	20	1.74	6.97
30.85- 31.15	6	15	2.09	5.23
30.55- 30.85	4	9	1.39	3.14
30.25- 30.55	0	5	0.00	1.74
29.95- 30.25	1	5	.35	1.74
29.65- 29.95	2	4	.70	1.39
29.35- 29.65	0	2	0.00	.70
29.05- 29.35	1	2	.35	.70
28.75- 29.05	0	1	0.00	.35
28.45- 28.75	1	1	.35	.35

64C FOOT BREADTH				
RANGES	FRQ	CUMF	FRQX	CUMFX
11.45- 11.55	1	286	.35	100.00
11.35- 11.45	1	285	.35	99.65
11.25- 11.35	0	284	0.00	99.30
11.15- 11.25	1	284	.35	99.30
11.05- 11.15	1	283	.35	98.95
10.95- 11.05	6	282	2.10	98.60
10.85- 10.95	5	276	1.75	96.50
10.75- 10.85	2	271	.70	94.76
10.65- 10.75	13	269	4.55	94.06
10.55- 10.65	9	256	3.15	89.51
10.45- 10.55	14	247	4.90	86.36
10.35- 10.45	10	233	3.50	81.47
10.25- 10.35	16	223	5.59	77.97
10.15- 10.25	16	207	5.59	72.38
10.05- 10.15	15	191	5.24	66.78
9.95- 10.05	25	176	8.74	61.54
9.85- 9.95	16	151	5.59	52.80
9.75- 9.85	23	135	8.04	47.20
9.65- 9.75	22	112	7.69	39.16
9.55- 9.65	17	90	5.94	31.47
9.45- 9.55	22	73	7.69	25.52
9.35- 9.45	12	51	4.20	17.83
9.25- 9.35	11	39	3.85	13.64
9.15- 9.25	9	28	3.15	9.79
9.05- 9.15	3	19	1.05	6.64
8.95- 9.05	3	16	1.05	5.59
8.85- 8.95	4	13	1.40	4.55
8.75- 8.85	2	9	.70	3.15
8.65- 8.75	2	7	.70	2.45
8.55- 8.65	1	5	.35	1.75
8.45- 8.55	1	4	.35	1.40
8.35- 8.45	1	3	.35	1.05
8.25- 8.35	0	2	0.00	.70
8.15- 8.25	0	2	0.00	.70
8.05- 8.15	2	2	.70	.70

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

660 FOOT CIRCUMFERENCE					690 SPHYRION HEIGHT				
RANGES	FRQ	CUMF	FRQX	CUMFX	RANGES	FRQ	CUMF	FRQX	CUMFX
28.35- 28.55	2	287	.70	100.00	9.35- 9.45	1	286	.35	100.00
28.15- 28.35	0	285	0.00	99.30	9.25- 9.35	0	285	0.00	99.65
27.95- 28.15	3	285	1.05	99.30	9.15- 9.25	0	285	0.00	99.65
27.75- 27.95	1	282	.35	98.26	9.05- 9.15	0	285	0.00	99.65
27.55- 27.75	5	281	1.74	97.91	8.95- 9.05	0	285	0.00	99.65
27.35- 27.55	6	276	2.09	96.17	8.85- 8.95	1	285	.35	99.65
27.15- 27.35	3	270	1.05	94.08	8.75- 8.85	0	284	0.00	99.30
26.95- 27.15	8	267	2.79	93.03	8.65- 8.75	2	284	.70	99.30
26.75- 26.95	5	259	1.74	90.24	8.55- 8.65	4	282	1.40	98.60
26.55- 26.75	10	254	3.48	88.50	8.45- 8.55	5	278	1.75	97.20
26.35- 26.55	12	244	4.18	85.02	8.35- 8.45	0	273	0.00	95.45
26.15- 26.35	7	232	2.44	80.84	8.25- 8.35	7	273	2.45	95.45
25.95- 26.15	17	225	5.92	78.40	8.15- 8.25	10	266	3.50	93.01
25.75- 25.95	15	208	5.23	72.47	8.05- 8.15	3	256	1.05	89.51
25.55- 25.75	12	193	4.18	67.25	7.95- 8.05	27	253	9.44	88.46
25.35- 25.55	10	181	3.48	63.07	7.85- 7.95	5	226	1.75	79.02
25.15- 25.35	11	171	3.83	59.58	7.75- 7.85	14	221	4.90	77.27
24.95- 25.15	32	160	11.15	55.75	7.65- 7.75	16	207	5.59	72.38
24.75- 24.95	7	128	2.44	44.60	7.55- 7.65	15	191	5.24	66.78
24.55- 24.75	16	121	5.57	42.16	7.45- 7.55	28	176	9.79	61.54
24.35- 24.55	35	105	12.20	36.59	7.35- 7.45	23	148	8.04	51.75
24.15- 24.35	14	70	4.88	24.39	7.25- 7.35	9	125	3.15	43.71
23.95- 24.15	8	56	2.79	19.51	7.15- 7.25	5	116	1.75	40.56
23.75- 23.95	13	48	4.53	16.72	7.05- 7.15	19	111	6.64	38.81
23.55- 23.75	7	35	2.44	12.20	6.95- 7.05	28	92	9.79	32.17
23.35- 23.55	9	28	3.14	9.76	6.85- 6.95	7	64	2.45	22.38
23.15- 23.35	7	19	2.44	6.62	6.75- 6.85	15	57	5.24	19.93
22.95- 23.15	3	12	1.05	4.18	6.65- 6.75	7	42	2.45	14.69
22.75- 22.95	1	9	.35	3.14	6.55- 6.65	8	35	2.80	12.24
22.55- 22.75	2	8	.70	2.79	6.45- 6.55	11	27	3.85	9.44
22.35- 22.55	1	6	.35	2.09	6.35- 6.45	5	16	1.75	5.59
22.15- 22.35	2	5	.70	1.74	6.25- 6.35	0	11	0.00	3.85
21.95- 22.15	1	3	.35	1.05	6.15- 6.25	3	11	1.05	3.85
21.75- 21.95	0	2	0.00	.70	6.05- 6.15	2	8	.70	2.60
21.55- 21.75	1	2	.35	.70	5.95- 6.05	5	6	1.75	2.10
21.35- 21.55	1	1	.35	.35	5.85- 5.95	0	1	0.00	.35
					5.75- 5.85	0	1	0.00	.35
					5.65- 5.75	0	1	0.00	.35
					5.55- 5.65	0	1	0.00	.35
					5.45- 5.55	1	1	.35	.35

FREQUENCY TABLES FOR CORE-SUBSERIES 1 MEASUREMENTS

29T WAIST HT/OMPHALION					30T MIDSHOULDER HT/SIT				
RANGES	FRQ	CUMF	FRQX	CUMFX	RANGES	FRQ	CUMF	FRQX	CUMFX
119.75-120.75	1	287	.35	100.00	68.75- 69.25	2	287	.70	100.00
118.75-119.75	0	286	0.00	99.65	68.25- 68.75	4	285	1.39	99.30
117.75-118.75	1	286	.35	99.65	67.75- 68.25	2	281	.70	97.91
116.75-117.75	2	285	.70	99.30	67.25- 67.75	1	279	.35	97.21
115.75-116.75	4	283	1.39	98.61	66.75- 67.25	3	278	1.05	96.86
114.75-115.75	2	279	.70	97.21	66.25- 66.75	3	275	1.05	95.82
113.75-114.75	5	277	1.74	96.52	65.75- 66.25	7	272	2.44	94.77
112.75-113.75	12	272	4.18	94.77	65.25- 65.75	9	265	3.14	92.33
111.75-112.75	11	260	3.83	90.59	64.75- 65.25	7	256	2.44	89.20
110.75-111.75	8	249	2.79	86.76	64.25- 64.75	11	249	3.83	86.76
109.75-110.75	15	241	5.23	83.97	63.75- 64.25	11	238	3.83	82.93
108.75-109.75	11	226	3.83	78.75	63.25- 63.75	14	227	4.88	79.09
107.75-108.75	21	215	7.32	74.91	62.75- 63.25	11	213	3.83	74.22
106.75-107.75	22	194	7.67	67.60	62.25- 62.75	22	202	7.67	70.38
105.75-106.75	18	172	6.27	59.93	61.75- 62.25	23	180	8.01	62.72
104.75-105.75	22	154	7.67	53.66	61.25- 61.75	23	157	8.01	54.70
103.75-104.75	24	132	8.36	45.99	60.75- 61.25	20	134	6.97	46.69
102.75-103.75	29	108	10.10	37.63	60.25- 60.75	11	114	3.83	39.72
101.75-102.75	14	79	4.88	27.53	59.75- 60.25	16	103	5.57	35.89
100.75-101.75	16	65	5.57	22.65	59.25- 59.75	17	87	5.92	30.31
99.75-100.75	12	49	4.16	17.07	58.75- 59.25	13	70	4.53	24.39
98.75- 99.75	8	37	2.79	12.89	58.25- 58.75	10	57	3.48	19.86
97.75- 98.75	8	29	2.79	10.10	57.75- 58.25	16	47	5.57	16.38
96.75- 97.75	4	21	1.39	7.32	57.25- 57.75	8	31	2.79	10.80
95.75- 96.75	7	17	2.44	5.92	56.75- 57.25	8	23	2.79	8.01
94.75- 95.75	1	10	.35	3.48	56.25- 56.75	5	15	1.74	5.23
93.75- 94.75	5	9	1.74	3.14	55.75- 56.25	3	10	1.05	3.48
92.75- 93.75	1	4	.35	1.39	55.25- 55.75	2	7	.70	2.44
91.75- 92.75	0	3	0.00	1.05	54.75- 55.25	1	5	.35	1.74
90.75- 91.75	1	3	.35	1.05	54.25- 54.75	1	4	.35	1.39
89.75- 90.75	1	2	.35	.70	53.75- 54.25	1	3	.35	1.05
88.75- 89.75	1	1	.35	.35	53.25- 53.75	1	2	.35	.70
					52.75- 53.25	1	1	.35	.35

B-2. FREQUENCY TABLES FOR THE WORKSPACE SUBSERIES

1W OVERHEAD REACH HGT					2W FUNCTIONAL REACH				
RANGES	FRQ	CUMF	FRQ%	CUMF%	RANGES	FRQ	CUMF	FRQ%	CUMF%
238.25-239.75	1	106	.94	100.00	87.75- 88.25	2	106	1.89	100.00
236.75-238.25	0	105	0.00	99.06	87.25- 87.75	2	104	1.89	98.11
235.25-236.75	0	105	0.00	99.06	86.75- 87.25	2	102	1.89	96.23
233.75-235.25	1	105	.94	99.06	86.25- 86.75	2	100	1.89	94.34
232.25-233.75	1	104	.94	98.11	85.75- 86.25	1	98	.94	92.45
230.75-232.25	1	103	.94	97.17	85.25- 85.75	2	97	1.89	91.51
229.25-230.75	5	102	4.72	96.23	84.75- 85.25	3	95	2.83	89.62
227.75-229.25	3	97	2.83	91.51	84.25- 84.75	3	92	2.83	86.79
226.25-227.75	3	94	2.83	88.68	83.75- 84.25	3	89	2.83	83.96
224.75-226.25	5	91	4.72	85.85	83.25- 83.75	3	86	2.83	81.13
223.25-224.75	2	86	1.89	81.13	82.75- 83.25	1	83	.94	78.30
221.75-223.25	1	84	.94	79.25	82.25- 82.75	3	82	2.83	77.36
220.75-221.75	4	83	3.77	78.30	81.75- 82.25	3	79	2.83	74.53
218.75-220.25	7	79	6.60	74.53	81.25- 81.75	5	76	4.72	71.70
217.25-218.75	7	72	6.60	67.92	80.75- 81.25	3	71	2.83	66.98
215.75-217.25	8	65	7.55	61.32	80.25- 80.75	10	68	9.43	64.15
214.25-215.75	10	57	9.43	53.77	79.75- 80.25	3	58	2.83	54.72
212.75-214.25	5	47	4.72	44.34	79.25- 79.75	7	55	6.60	51.89
211.25-212.75	5	42	4.72	39.62	78.75- 79.25	10	48	9.43	45.28
209.75-211.25	8	37	7.55	34.91	78.25- 78.75	4	38	3.77	35.85
208.25-209.75	8	29	7.55	27.36	77.75- 78.25	6	34	5.66	32.08
206.75-208.25	3	21	2.83	19.81	77.25- 77.75	5	28	4.72	26.42
205.25-206.75	3	18	2.83	16.98	76.75- 77.25	4	23	3.77	21.70
203.75-205.25	5	15	4.72	14.15	76.25- 76.75	0	19	0.00	17.92
202.25-203.75	2	10	1.89	9.43	75.75- 76.25	2	19	1.89	17.92
200.75-202.25	0	8	0.00	7.55	75.25- 75.75	2	17	1.89	16.04
199.25-200.75	3	8	2.83	7.55	74.75- 75.25	2	15	1.89	14.15
197.75-199.25	2	5	1.89	4.72	74.25- 74.75	0	13	0.00	12.26
196.25-197.75	1	3	.94	2.83	73.75- 74.25	4	13	3.77	12.26
194.75-196.25	1	2	.94	1.89	73.25- 73.75	2	9	1.89	8.49
193.25-194.75	0	1	0.00	.94	72.75- 73.25	1	7	.94	6.60
191.75-193.25	0	1	0.00	.94	72.25- 72.75	0	6	0.00	5.66
190.25-191.75	0	1	0.00	.94	71.75- 72.25	2	6	1.89	5.66
188.75-190.25	0	1	0.00	.94	71.25- 71.75	0	4	0.00	3.77
187.25-188.75	0	1	0.00	.94	70.75- 71.25	1	4	.94	3.77
185.75-187.25	0	1	0.00	.94	70.25- 70.75	2	3	1.89	2.83
184.25-185.75	1	1	.94	.94	69.75- 70.25	0	1	0.00	.94
					69.25- 69.75	0	1	0.00	.94
					68.75- 69.25	1	1	.94	.94

FREQUENCY TABLES FOR WORK SPACE MEASUREMENTS

3M FUNCTIONAL RCH/EXT					4M OVERHEAD REACH/SIT				
RANGES	FRQ	CUMF	FRQ%	CUMF%	RANGES	FRQ	CUMF	FRQ%	CUMF%
103.75-104.75	2	106	1.89	100.00	153.45-154.45	1	100	.94	100.00
102.75-103.75	0	104	0.00	98.11	152.45-153.45	0	105	0.00	99.06
101.75-102.75	3	104	2.83	98.11	151.45-152.45	1	105	.94	99.06
100.75-101.75	2	101	1.89	95.28	150.45-151.45	0	104	0.00	98.11
99.75-100.75	4	99	3.77	93.40	149.45-150.45	1	104	.94	98.11
98.75- 99.75	0	95	0.00	89.62	148.45-149.45	1	103	.94	97.17
97.75- 98.75	6	95	5.66	89.62	147.45-148.45	0	102	0.00	96.23
96.75- 97.75	2	89	1.89	83.90	146.45-147.45	0	102	0.00	96.23
95.75- 96.75	3	87	2.83	82.08	145.45-146.45	1	102	.94	96.23
94.75- 95.75	5	84	4.72	79.25	144.45-145.45	5	101	4.72	95.28
93.75- 94.75	3	79	2.83	74.53	143.45-144.45	1	96	.94	90.57
92.75- 93.75	14	76	13.21	71.70	142.45-143.45	5	95	4.72	89.62
91.75- 92.75	8	62	7.55	58.49	141.45-142.45	7	90	6.60	84.91
90.75- 91.75	8	54	7.55	50.94	140.45-141.45	0	83	5.66	78.30
89.75- 90.75	7	46	6.60	43.40	139.45-140.45	7	77	6.60	72.04
88.75- 89.75	10	39	9.43	36.79	138.45-139.45	7	70	6.60	66.04
87.75- 88.75	6	29	5.66	27.30	137.45-138.45	4	63	3.77	59.43
86.75- 87.75	3	23	2.83	21.70	136.45-137.45	4	59	3.77	55.66
85.75- 86.75	8	20	7.55	18.87	135.45-136.45	10	55	9.43	51.89
84.75- 85.75	3	12	2.83	11.32	134.45-135.45	10	45	9.43	42.45
83.75- 84.75	5	9	4.72	8.49	133.45-134.45	5	35	4.72	33.02
82.75- 83.75	2	4	1.89	3.77	132.45-133.45	9	30	8.49	28.30
81.75- 82.75	1	2	.94	1.89	131.45-132.45	6	21	5.66	19.81
80.75- 81.75	0	1	0.00	.94	130.45-131.45	0	15	5.66	14.15
79.75- 80.75	0	1	0.00	.94	129.45-130.45	1	9	.94	8.49
78.75- 79.75	0	1	0.00	.94	128.45-129.45	3	8	2.83	7.55
77.75- 78.75	1	1	.94	.94	127.45-128.45	0	5	0.00	4.72
					126.45-127.45	2	5	1.89	4.72
					125.45-126.45	0	3	0.00	2.83
					124.45-125.45	0	3	0.00	2.83
					123.45-124.45	1	3	.94	2.83
					122.45-123.45	0	2	0.00	1.89
					121.45-122.45	0	2	0.00	1.89
					120.45-121.45	1	2	.94	1.89
					119.45-120.45	0	1	0.00	.94
					118.45-119.45	1	1	.94	.94

FREQUENCY TABLES FOR WORK SPACE MEASUREMENTS

5W FUNCTIONAL LEG LN				
RANGES	FRQ	CUMF	FRQ%	CUMF%
130.75-131.75	2	106	1.89	100.00
129.75-130.75	0	104	0.00	98.11
128.75-129.75	0	104	0.00	98.11
127.75-128.75	3	104	2.83	98.11
126.75-127.75	3	101	2.83	95.28
125.75-126.75	2	98	1.89	92.45
124.75-125.75	4	96	3.77	90.57
123.75-124.75	2	92	1.89	86.79
122.75-123.75	4	90	3.77	84.91
121.75-122.75	9	86	8.49	81.13
120.75-121.75	7	77	6.60	72.64
119.75-120.75	9	70	8.49	66.04
118.75-119.75	7	61	6.60	57.55
117.75-118.75	6	54	5.66	50.94
116.75-117.75	10	48	9.43	45.28
115.75-116.75	6	38	5.66	35.85
114.75-115.75	6	32	5.66	30.19
113.75-114.75	4	26	3.77	24.53
112.75-113.75	2	22	1.89	20.75
111.75-112.75	7	20	6.60	18.87
110.75-111.75	7	13	6.60	12.26
109.75-110.75	4	0	3.77	5.66
108.75-109.75	1	2	.94	1.89
107.75-108.75	0	1	0.00	.94
106.75-107.75	0	1	0.00	.94
105.75-106.75	0	1	0.00	.94
104.75-105.75	1	1	.94	.94

6W WEIGHT (CLOTHED)				
RANGES	FRQ	CUMF	FRQ%	CUMF%
224.75-227.25	1	106	.94	100.00
222.25-224.75	0	105	0.00	99.06
219.75-222.25	0	105	0.00	99.06
217.25-219.75	1	105	.94	99.06
214.75-217.25	0	104	0.00	98.11
212.25-214.75	0	104	0.00	98.11
209.75-212.25	0	104	0.00	98.11
207.25-209.75	1	104	.94	98.11
204.75-207.25	0	103	0.00	97.17
202.25-204.75	1	103	.94	97.17
199.75-202.25	1	102	.94	96.23
197.25-199.75	0	101	0.00	95.28
194.75-197.25	2	101	1.89	95.28
192.25-194.75	2	99	1.89	93.40
189.75-192.25	2	97	1.89	91.51
187.25-189.75	3	95	2.83	89.62
184.75-187.25	1	92	.94	86.79
182.25-184.75	2	91	1.89	85.85
179.75-182.25	2	89	1.89	83.96
177.25-179.75	3	87	2.83	82.08
174.75-177.25	5	84	4.72	79.25
172.25-174.75	1	79	.94	74.53
169.75-172.25	1	78	.94	73.58
167.25-169.75	2	77	1.89	72.64
164.75-167.25	5	75	4.72	70.75
162.25-164.75	3	70	2.83	66.04
159.75-162.25	5	67	4.72	63.21
157.25-159.75	5	62	4.72	58.49
154.75-157.25	7	57	6.60	53.77
152.25-154.75	6	50	5.66	47.17
149.75-152.25	4	44	3.77	41.51
147.25-149.75	2	40	1.89	37.74
144.75-147.25	6	38	5.66	35.85
142.25-144.75	11	32	10.38	30.19
139.75-142.25	4	21	3.77	19.81
137.25-139.75	5	17	4.72	16.04
134.75-137.25	1	12	.94	11.32
132.25-134.75	3	11	2.83	10.38
129.75-132.25	0	8	0.00	7.55
127.25-129.75	3	8	2.83	7.55
124.75-127.25	3	5	2.83	4.72
122.25-124.75	1	2	.94	1.89
119.75-122.25	0	1	0.00	.94
117.25-119.75	0	1	0.00	.94
114.75-117.25	0	1	0.00	.94
112.25-114.75	0	1	0.00	.94
109.75-112.25	0	1	0.00	.94
107.25-109.75	1	1	.94	.94

FREQUENCY TABLES FOR WORK SPACE MEASUREMENTS

7W STATURE (CLOTHED)				
RANGES	FRQ	CUMF	FRQ%	CUMF%
195.75-196.75	1	106	.94	100.00
194.75-195.75	0	105	0.00	99.06
193.75-194.75	0	105	0.00	99.06
192.75-193.75	0	105	0.00	99.06
191.75-192.75	0	105	0.00	99.06
190.75-191.75	0	105	0.00	99.06
189.75-190.75	2	105	1.89	99.06
188.75-189.75	3	103	2.83	97.17
187.75-188.75	1	100	.94	94.34
186.75-187.75	0	99	0.00	93.40
185.75-186.75	6	99	5.66	93.40
184.75-185.75	2	93	1.89	87.74
183.75-184.75	2	91	1.89	85.85
182.75-183.75	4	89	3.77	83.96
181.75-182.75	8	85	7.55	80.19
180.75-181.75	7	77	6.60	72.64
179.75-180.75	3	70	2.83	66.04
178.75-179.75	5	67	4.72	63.21
177.75-178.75	7	62	6.60	58.49
176.75-177.75	10	55	9.43	51.89
175.75-176.75	6	45	5.66	42.45
174.75-175.75	8	39	7.55	36.79
173.75-174.75	2	31	1.89	29.25
172.75-173.75	6	29	5.66	27.36
171.75-172.75	8	23	7.55	21.70
170.75-171.75	4	15	3.77	14.15
169.75-170.75	2	11	1.89	10.38
168.75-169.75	3	9	2.83	8.49
167.75-168.75	3	6	2.83	5.66
166.75-167.75	0	3	0.00	2.83
165.75-166.75	0	3	0.00	2.83
164.75-165.75	0	3	0.00	2.83
163.75-164.75	1	3	.94	2.83
162.75-163.75	0	2	0.00	1.89
161.75-162.75	0	2	0.00	1.89
160.75-161.75	2	2	1.89	1.89

8W OVERHEAD RCH BRDTH				
RANGES	FRQ	CUMF	FRQ%	CUMF%
44.05- 44.35	1	106	.94	100.00
43.75- 44.05	0	105	0.00	99.06
43.45- 43.75	0	105	0.00	99.06
43.15- 43.45	1	105	.94	99.06
42.85- 43.15	0	104	0.00	98.11
42.55- 42.85	1	104	.94	98.11
42.25- 42.55	2	103	1.89	97.17
41.95- 42.25	0	101	0.00	95.28
41.65- 41.95	0	101	0.00	95.28
41.35- 41.65	2	101	1.89	95.28
41.05- 41.35	5	99	4.72	93.40
40.75- 41.05	1	94	.94	88.68
40.45- 40.75	4	93	3.77	87.74
40.15- 40.45	8	89	7.55	83.96
39.85- 40.15	5	81	4.72	76.42
39.55- 39.85	5	76	4.72	71.70
39.25- 39.55	3	71	2.83	66.98
38.95- 39.25	2	68	1.89	64.15
38.65- 38.95	7	66	6.60	62.26
38.35- 38.65	7	59	6.60	55.66
38.05- 38.35	6	52	5.66	49.06
37.75- 38.05	6	46	5.66	43.40
37.45- 37.75	7	40	6.60	37.74
37.15- 37.45	7	33	6.60	31.13
36.85- 37.15	7	26	6.60	24.53
36.55- 36.85	4	19	3.77	17.92
36.25- 36.55	0	15	0.00	14.15
35.95- 36.25	2	15	1.89	14.15
35.65- 35.95	3	13	2.83	12.26
35.35- 35.65	0	10	0.00	9.43
35.05- 35.35	5	10	4.72	9.43
34.75- 35.05	2	5	1.89	4.72
34.45- 34.75	1	3	.94	2.83
34.15- 34.45	1	2	.94	1.89
33.85- 34.15	0	1	0.00	.94
33.55- 33.85	1	1	.94	.94

FREQUENCY TABLES FOR WORK SPACE MEASUREMENTS

9W BENT TORSO HEIGHT				
RANGES	FRQ	CUMF	FRQ%	CUMF%
151.75-152.75	3	106	2.83	100.00
150.75-151.75	1	103	.94	97.17
149.75-150.75	1	102	.94	96.23
148.75-149.75	2	101	1.89	95.28
147.75-148.75	2	99	1.89	93.40
146.75-147.75	2	97	1.89	91.51
145.75-146.75	5	95	4.72	89.62
144.75-145.75	1	90	.94	84.91
143.75-144.75	6	89	5.66	83.96
142.75-143.75	5	83	4.72	78.30
141.75-142.75	4	78	3.77	73.58
140.75-141.75	2	74	1.89	69.81
139.75-140.75	6	72	5.66	67.92
138.75-139.75	4	66	3.77	62.26
137.75-138.75	5	62	4.72	58.49
136.75-137.75	5	57	4.72	53.77
135.75-136.75	5	52	4.72	49.06
134.75-135.75	3	47	2.83	44.34
133.75-134.75	4	44	3.77	41.51
132.75-133.75	11	40	10.38	37.74
131.75-132.75	7	29	6.60	27.36
130.75-131.75	3	22	2.83	20.75
129.75-130.75	2	19	1.89	17.92
128.75-129.75	3	17	2.83	16.04
127.75-128.75	3	14	2.83	13.21
126.75-127.75	3	11	2.83	10.38
125.75-126.75	3	8	2.83	7.55
124.75-125.75	1	5	.94	4.72
123.75-124.75	0	4	0.00	3.77
122.75-123.75	3	4	2.83	3.77
121.75-122.75	0	1	0.00	.94
120.75-121.75	0	1	0.00	.94
119.75-120.75	1	1	.94	.94

10W BENT TORSO BREADTH				
RANGES	FRQ	CUMF	FRQ%	CUMF%
51.55- 51.85	1	106	.94	100.00
51.25- 51.55	0	105	0.00	99.06
50.95- 51.25	0	105	0.00	99.06
50.65- 50.95	0	105	0.00	99.06
50.35- 50.65	0	105	0.00	99.06
50.05- 50.35	0	105	0.00	99.06
49.75- 50.05	1	105	.94	99.06
49.45- 49.75	1	104	.94	98.11
49.15- 49.45	0	103	0.00	97.17
48.85- 49.15	1	103	.94	97.17
48.55- 48.85	0	102	0.00	96.23
48.25- 48.55	2	102	1.89	96.23
47.95- 48.25	1	100	.94	94.34
47.65- 47.95	1	99	.94	93.40
47.35- 47.65	3	98	2.83	92.45
47.05- 47.35	1	95	.94	89.62
46.75- 47.05	7	94	6.60	88.68
46.45- 46.75	2	87	1.89	82.08
46.15- 46.45	3	85	2.83	80.19
45.85- 46.15	5	82	4.72	77.36
45.55- 45.85	2	77	1.89	72.64
45.25- 45.55	8	75	7.55	70.75
44.95- 45.25	13	67	12.26	63.21
44.65- 44.95	6	54	5.66	50.94
44.35- 44.65	9	48	8.49	45.28
44.05- 44.35	6	39	5.66	36.79
43.75- 44.05	2	33	1.89	31.13
43.45- 43.75	5	31	4.72	29.25
43.15- 43.45	2	26	1.89	24.53
42.85- 43.15	5	24	4.72	22.64
42.55- 42.85	1	19	.94	17.92
42.25- 42.55	4	18	3.77	16.98
41.95- 42.25	1	14	.94	13.21
41.65- 41.95	6	13	5.66	12.26
41.35- 41.65	0	7	0.00	6.60
41.05- 41.35	1	7	.94	6.60
40.75- 41.05	1	6	.94	5.66
40.45- 40.75	0	5	0.00	4.72
40.15- 40.45	2	5	1.89	4.72
39.85- 40.15	0	3	0.00	2.83
39.55- 39.85	1	3	.94	2.83
39.25- 39.55	0	2	0.00	1.89
38.95- 39.25	0	2	0.00	1.89
38.65- 38.95	1	2	.94	1.89
38.35- 38.65	0	1	0.00	.94
38.05- 38.35	0	1	0.00	.94
37.75- 38.05	1	1	.94	.94

FREQUENCY TABLES FOR WORK SPACE MEASUREMENTS

11W KNEELING HEIGHT				
RANGES	FRQ	CUMF	FRQX	CUMFX
141.25-141.75	1	106	.94	100.00
140.75-141.25	0	105	0.00	99.06
140.25-140.75	0	105	0.00	99.06
139.75-140.25	0	105	0.00	99.06
139.25-139.75	1	105	.94	99.06
138.75-139.25	0	104	0.00	98.11
138.25-138.75	0	104	0.00	98.11
137.75-138.25	0	104	0.00	98.11
137.25-137.75	3	104	2.83	98.11
136.75-137.25	1	101	.94	95.28
136.25-136.75	0	100	0.00	94.34
135.75-136.25	3	100	2.83	94.34
135.25-135.75	1	97	.94	91.51
134.75-135.25	1	96	.94	90.57
134.25-134.75	1	95	.94	89.62
133.75-134.25	5	94	4.72	88.68
133.25-133.75	1	89	.94	83.96
132.75-133.25	6	88	5.66	83.02
132.25-132.75	6	82	5.66	77.36
131.75-132.25	1	76	.94	71.70
131.25-131.75	6	75	5.66	70.75
130.75-131.25	6	69	5.66	65.09
130.25-130.75	3	63	2.83	59.43
129.75-130.25	2	60	1.89	56.60
129.25-129.75	3	58	2.83	54.72
128.75-129.25	3	55	2.83	51.89
128.25-128.75	2	52	1.89	49.06
127.75-128.25	5	50	4.72	47.17
127.25-127.75	4	45	3.77	42.45
126.75-127.25	7	41	6.60	38.68
126.25-126.75	5	34	4.72	32.08
125.75-126.25	4	29	3.77	27.36
125.25-125.75	8	25	7.55	23.58
124.75-125.25	2	17	1.89	16.04
124.25-124.75	2	15	1.89	14.15
123.75-124.25	2	13	1.89	12.26
123.25-123.75	0	11	0.00	10.38
122.75-123.25	5	11	4.72	10.38
122.25-122.75	2	6	1.89	5.66
121.75-122.25	1	4	.94	3.77
121.25-121.75	0	3	0.00	2.83
120.75-121.25	0	3	0.00	2.83
120.25-120.75	0	3	0.00	2.83
119.75-120.25	0	3	0.00	2.83
119.25-119.75	0	3	0.00	2.83
118.75-119.25	0	3	0.00	2.83
118.25-118.75	1	3	.94	2.83
117.75-118.25	1	2	.94	1.89
117.25-117.75	0	1	0.00	.94
116.75-117.25	1	1	.94	.94

12W KNEELING LEG LNTH				
RANGES	FRQ	CUMF	FRQX	CUMFX
78.75- 79.25	1	106	.94	100.00
78.25- 78.75	0	105	0.00	99.06
77.75- 78.25	0	105	0.00	99.06
77.25- 77.75	0	105	0.00	99.06
76.75- 77.25	0	105	0.00	99.06
76.25- 76.75	0	105	0.00	99.06
75.75- 76.25	2	105	1.89	99.06
75.25- 75.75	4	103	3.77	97.17
74.75- 75.25	1	99	.94	93.40
74.25- 74.75	1	98	.94	92.45
73.75- 74.25	4	97	3.77	91.51
73.25- 73.75	1	93	.94	87.74
72.75- 73.25	4	92	3.77	86.79
72.25- 72.75	5	88	4.72	83.02
71.75- 72.25	3	83	2.83	78.30
71.25- 71.75	2	80	1.89	75.47
70.75- 71.25	12	78	11.32	73.58
70.25- 70.75	4	66	3.77	62.26
69.75- 70.25	6	62	5.66	58.49
69.25- 69.75	5	56	4.72	52.83
68.75- 69.25	6	51	5.66	48.11
68.25- 68.75	5	45	4.72	42.45
67.75- 68.25	5	40	4.72	37.74
67.25- 67.75	5	35	4.72	33.02
66.75- 67.25	7	30	6.60	28.30
66.25- 66.75	4	23	3.77	21.70
65.75- 66.25	2	19	1.89	17.92
65.25- 65.75	4	17	3.77	16.04
64.75- 65.25	5	13	4.72	12.26
64.25- 64.75	2	8	1.89	7.55
63.75- 64.25	1	6	.94	5.66
63.25- 63.75	1	5	.94	4.72
62.75- 63.25	0	4	0.00	3.77
62.25- 62.75	1	4	.94	3.77
61.75- 62.25	0	3	0.00	2.83
61.25- 61.75	1	3	.94	2.83
60.75- 61.25	0	2	0.00	1.89
60.25- 60.75	0	2	0.00	1.89
59.75- 60.25	0	2	0.00	1.89
59.25- 59.75	1	2	.94	1.89
58.75- 59.25	0	1	0.00	.94
58.25- 58.75	0	1	0.00	.94
57.75- 58.25	0	1	0.00	.94
57.25- 57.75	0	1	0.00	.94
56.75- 57.25	1	1	.94	.94

FREQUENCY TABLES FOR WORK SPACE MEASUREMENTS

13W BENT KNEE HEIGHT				
RANGES	FRQ	CUMF	FRQ%	CUMF%
54.85- 55.15	1	106	.94	100.00
54.55- 54.85	0	105	0.00	99.06
54.25- 54.55	1	105	.94	99.06
53.95- 54.25	2	104	1.89	98.11
53.65- 53.95	1	102	.94	96.23
53.35- 53.65	1	101	.94	95.28
53.05- 53.35	2	100	1.89	94.34
52.75- 53.05	3	98	2.83	92.45
52.45- 52.75	1	95	.94	89.62
52.15- 52.45	1	94	.94	88.68
51.85- 52.15	3	93	2.83	87.74
51.55- 51.85	5	90	4.72	84.91
51.25- 51.55	3	85	2.83	80.19
50.95- 51.25	3	82	2.83	77.36
50.65- 50.95	5	79	4.72	74.53
50.35- 50.65	6	74	5.66	69.81
50.05- 50.35	2	68	1.89	64.15
49.75- 50.05	1	66	.94	62.26
49.45- 49.75	3	65	2.83	61.32
49.15- 49.45	6	62	5.66	58.49
48.85- 49.15	2	56	1.89	52.83
48.55- 48.85	4	54	3.77	50.94
48.25- 48.55	6	50	5.66	47.17
47.95- 48.25	5	44	4.72	41.51
47.65- 47.95	7	39	6.60	36.79
47.35- 47.65	3	32	2.83	30.19
47.05- 47.35	5	29	4.72	27.36
46.75- 47.05	2	24	1.89	22.64
46.45- 46.75	7	22	6.60	20.75
46.15- 46.45	3	15	2.83	14.15
45.85- 46.15	3	12	2.83	11.32
45.55- 45.85	1	9	.94	8.49
45.25- 45.55	0	8	0.00	7.55
44.95- 45.25	1	8	.94	7.55
44.65- 44.95	1	7	.94	6.60
44.35- 44.65	0	6	0.00	5.66
44.05- 44.35	2	6	1.89	5.66
43.75- 44.05	1	4	.94	3.77
43.45- 43.75	2	3	1.89	2.83
43.15- 43.45	0	1	0.00	.94
42.85- 43.15	0	1	0.00	.94
42.55- 42.85	0	1	0.00	.94
42.25- 42.55	0	1	0.00	.94
41.95- 42.25	0	1	0.00	.94
41.65- 41.95	1	1	.94	.94

14W HORIZ L/KNEES BENT				
RANGES	FRQ	CUMF	FRQ%	CUMF%
174.75-175.75	2	106	1.89	100.00
173.75-174.75	3	104	2.83	98.11
172.75-173.75	1	101	.94	95.28
171.75-172.75	3	100	2.83	94.34
170.75-171.75	2	97	1.89	91.51
169.75-170.75	3	95	2.83	89.62
168.75-169.75	3	92	2.83	86.79
167.75-168.75	1	89	.94	83.96
166.75-167.75	4	88	3.77	83.02
165.75-166.75	3	84	2.83	79.25
164.75-165.75	8	81	7.55	76.42
163.75-164.75	5	73	4.72	68.87
162.75-163.75	4	68	3.77	64.15
161.75-162.75	8	64	7.55	60.38
160.75-161.75	2	56	1.89	52.83
159.75-160.75	7	54	6.60	50.94
158.75-159.75	8	47	7.55	44.34
157.75-158.75	3	39	2.83	36.79
156.75-157.75	6	36	5.66	33.96
155.75-156.75	7	30	6.60	28.30
154.75-155.75	2	23	1.89	21.70
153.75-154.75	4	21	3.77	19.81
152.75-153.75	4	17	3.77	16.04
151.75-152.75	5	13	4.72	12.26
150.75-151.75	3	8	2.83	7.55
149.75-150.75	2	5	1.89	4.72
148.75-149.75	2	3	1.89	2.83
147.75-148.75	1	1	.94	.94

FREQUENCY TABLES FOR WORK SPACE MEASUREMENTS

1C WEIGHT-NODE				
RANGES	FRQ	CUMF	FRQ%	CUMF%
219.75-222.25	1	106	.94	100.00
217.25-219.75	0	105	0.00	99.06
214.75-217.25	0	105	0.00	99.06
212.25-214.75	0	105	0.00	99.06
209.75-212.25	1	105	.94	99.06
207.25-209.75	0	104	0.00	98.11
204.75-207.25	0	104	0.00	98.11
202.25-204.75	0	104	0.00	98.11
199.75-202.25	1	104	.94	98.11
197.25-199.75	0	103	0.00	97.17
194.75-197.25	2	103	1.89	97.17
192.25-194.75	0	101	0.00	95.28
189.75-192.25	1	101	.94	95.28
187.25-189.75	1	100	.94	94.34
184.75-187.25	3	99	2.83	93.40
182.25-184.75	2	96	1.89	90.57
179.75-182.25	2	94	1.89	88.68
177.25-179.75	1	92	.94	86.79
174.75-177.25	3	91	2.83	85.85
172.25-174.75	3	88	2.83	83.02
169.75-172.25	5	85	4.72	80.19
167.25-169.75	2	80	1.89	75.47
164.75-167.25	1	78	.94	73.58
162.25-164.75	2	77	1.89	72.64
159.75-162.25	4	75	3.77	70.75
157.25-159.75	5	71	4.72	66.98
154.75-157.25	4	66	3.77	62.26
152.25-154.75	4	62	3.77	58.49
149.75-152.25	7	58	6.60	54.72
147.25-149.75	5	51	4.72	48.11
144.75-147.25	3	46	2.83	43.40
142.25-144.75	6	43	5.66	40.57
139.75-142.25	2	37	1.89	34.91
137.25-139.75	10	35	9.43	33.02
134.75-137.25	8	25	7.55	23.58
132.25-134.75	4	17	3.77	18.04
129.75-132.25	2	13	1.89	12.26
127.25-129.75	3	11	2.83	10.38
124.75-127.25	0	8	0.00	7.55
122.25-124.75	2	8	1.89	7.55
119.75-122.25	2	6	1.89	5.66
117.25-119.75	3	4	2.83	3.77
114.75-117.25	0	1	0.00	.94
112.25-114.75	0	1	0.00	.94
109.75-112.25	0	1	0.00	.94
107.25-109.75	0	1	0.00	.94
104.75-107.25	0	1	0.00	.94
102.25-104.75	1	1	.94	.94

2C STATURE-NODE				
RANGES	FRQ	CUMF	FRQ%	CUMF%
192.75-193.75	1	106	.94	100.00
191.75-192.75	0	105	0.00	99.06
190.75-191.75	0	105	0.00	99.06
189.75-190.75	0	105	0.00	99.06
188.75-189.75	0	105	0.00	99.06
187.75-188.75	0	105	0.00	99.06
186.75-187.75	1	105	.94	99.06
185.75-186.75	1	104	.94	98.11
184.75-185.75	3	103	2.83	97.17
183.75-184.75	1	100	.94	94.34
182.75-183.75	3	99	2.83	93.40
181.75-182.75	3	96	2.83	90.57
180.75-181.75	4	93	3.77	87.74
179.75-180.75	3	89	2.83	83.96
178.75-179.75	4	86	3.77	81.13
177.75-178.75	4	82	3.77	77.36
176.75-177.75	8	78	7.55	73.58
175.75-176.75	5	70	4.72	66.04
174.75-175.75	5	65	4.72	61.32
173.75-174.75	10	60	9.43	56.60
172.75-173.75	4	50	3.77	47.17
171.75-172.75	7	46	6.60	43.40
170.75-171.75	7	39	6.60	36.79
169.75-170.75	5	32	4.72	30.19
168.75-169.75	6	27	5.66	25.47
167.75-168.75	6	21	5.66	19.81
166.75-167.75	4	15	3.77	14.15
165.75-166.75	3	11	2.83	10.38
164.75-165.75	1	8	.94	7.55
163.75-164.75	1	7	.94	6.60
162.75-163.75	3	6	2.83	5.66
161.75-162.75	0	3	0.00	2.83
160.75-161.75	0	3	0.00	2.83
159.75-160.75	1	3	.94	2.83
158.75-159.75	0	2	0.00	1.89
157.75-158.75	1	2	.94	1.89
156.75-157.75	0	1	0.00	.94
155.75-156.75	1	1	.94	.94

B-3. FREQUENCY TABLES FOR THE HEAD AND FACE SUBSERIES

1H SAGITTAL ARC					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
38.75- 38.95	1	102	.98	100.00	
38.55- 38.75	0	101	0.00	99.02	
38.35- 38.55	1	101	.98	99.02	
38.15- 38.35	1	100	.98	98.04	
37.95- 38.15	1	99	.98	97.06	
37.75- 37.95	1	98	.98	96.08	
37.55- 37.75	0	97	0.00	95.10	
37.35- 37.55	1	97	.98	95.10	
37.15- 37.35	1	96	.98	94.12	
36.95- 37.15	1	95	.98	93.14	
36.75- 36.95	3	94	2.94	92.16	
36.55- 36.75	1	91	.98	89.22	
36.35- 36.55	0	90	0.00	88.24	
36.15- 36.35	5	90	4.90	88.24	
35.95- 36.15	3	85	2.94	83.33	
35.75- 35.95	5	82	4.90	80.39	
35.55- 35.75	1	77	.98	75.49	
35.35- 35.55	5	76	4.90	74.51	
35.15- 35.35	7	71	6.86	69.61	
34.95- 35.15	6	64	5.88	62.75	
34.75- 34.95	10	58	9.80	56.86	
34.55- 34.75	4	48	3.92	47.06	
34.35- 34.55	5	44	4.90	43.14	
34.15- 34.35	8	39	7.84	38.24	
33.95- 34.15	2	31	1.96	30.39	
33.75- 33.95	5	29	4.90	28.43	
33.55- 33.75	1	24	.98	23.53	
33.35- 33.55	7	23	6.86	22.55	
33.15- 33.35	4	16	3.92	15.69	
32.95- 33.15	6	12	5.88	11.76	
32.75- 32.95	1	6	.98	5.88	
32.55- 32.75	2	5	1.96	4.90	
32.35- 32.55	0	3	0.00	2.94	
32.15- 32.35	0	3	0.00	2.94	
31.95- 32.15	0	3	0.00	2.94	
31.75- 31.95	0	3	0.00	2.94	
31.55- 31.75	1	3	.98	2.94	
31.35- 31.55	1	2	.98	1.96	
31.15- 31.35	0	1	0.00	.98	
30.95- 31.15	0	1	0.00	.98	
30.75- 30.95	0	1	0.00	.98	
30.55- 30.75	0	1	0.00	.98	
30.35- 30.55	0	1	0.00	.98	
30.15- 30.35	0	1	0.00	.98	
29.95- 30.15	1	1	.98	.98	

2H BIT'ON-CORONAL ARC					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
37.15- 37.35	1	102	.98	100.00	
36.95- 37.15	0	101	0.00	99.02	
36.75- 36.95	0	101	0.00	99.02	
36.55- 36.75	0	101	0.00	99.02	
36.35- 36.55	2	101	1.96	99.02	
36.15- 36.35	1	99	.98	97.06	
35.95- 36.15	4	98	3.92	96.08	
35.75- 35.95	4	94	3.92	92.16	
35.55- 35.75	1	90	.98	88.24	
35.35- 35.55	3	89	2.94	87.25	
35.15- 35.35	0	86	0.00	84.31	
34.95- 35.15	14	86	13.73	84.31	
34.75- 34.95	7	72	6.86	70.59	
34.55- 34.75	3	65	2.94	63.73	
34.35- 34.55	7	62	6.86	60.78	
34.15- 34.35	5	55	4.90	53.92	
33.95- 34.15	6	50	5.88	49.02	
33.75- 33.95	4	44	3.92	43.14	
33.55- 33.75	4	40	3.92	39.22	
33.35- 33.55	7	36	6.86	35.29	
33.15- 33.35	4	29	3.92	28.43	
32.95- 33.15	9	25	8.82	24.51	
32.75- 32.95	1	16	.98	15.69	
32.55- 32.75	2	15	1.96	14.71	
32.35- 32.55	5	13	4.90	12.75	
32.15- 32.35	2	8	1.96	7.84	
31.95- 32.15	1	6	.98	5.88	
31.75- 31.95	0	5	0.00	4.90	
31.55- 31.75	2	5	1.96	4.90	
31.35- 31.55	2	3	1.96	2.94	
31.15- 31.35	0	1	0.00	.98	
30.95- 31.15	1	1	.98	.98	

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

3H BIT*ON-FRONTAL ARC					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
31.55- 31.75	2	102	1.96	100.00	
31.35- 31.55	2	100	1.96	98.04	
31.15- 31.35	1	98	.98	96.08	
30.95- 31.15	3	97	2.94	95.10	
30.75- 30.95	2	94	1.96	92.16	
30.55- 30.75	3	92	2.94	90.20	
30.35- 30.55	4	89	3.92	87.25	
30.15- 30.35	3	85	2.94	83.33	
29.95- 30.15	7	82	6.86	80.39	
29.75- 29.95	5	75	4.90	73.53	
29.55- 29.75	10	70	9.80	68.63	
29.35- 29.55	11	60	10.78	58.82	
29.15- 29.35	9	49	8.82	48.04	
28.95- 29.15	3	40	2.94	39.22	
28.75- 28.95	4	37	3.92	36.27	
28.55- 28.75	5	33	4.90	32.35	
28.35- 28.55	9	28	8.82	27.45	
28.15- 28.35	4	19	3.92	18.63	
27.95- 28.15	7	15	6.86	14.71	
27.75- 27.95	0	8	0.00	7.84	
27.55- 27.75	3	8	2.94	7.84	
27.35- 27.55	2	5	1.96	4.90	
27.15- 27.35	1	3	.98	2.94	
26.95- 27.15	1	2	.98	1.96	
26.75- 26.95	0	1	0.00	.98	
26.55- 26.75	0	1	0.00	.98	
26.35- 26.55	1	1	.98	.98	

4H BIT*ON-MENTON ARC					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
34.15- 34.35	1	102	.98	100.00	
33.95- 34.15	1	101	.98	99.02	
33.75- 33.95	0	100	0.00	98.04	
33.55- 33.75	0	100	0.00	98.04	
33.35- 33.55	2	100	1.96	98.04	
33.15- 33.35	1	98	.98	96.08	
32.95- 33.15	1	97	.98	95.10	
32.75- 32.95	3	96	2.94	94.12	
32.55- 32.75	5	93	4.90	91.18	
32.35- 32.55	4	88	3.92	86.27	
32.15- 32.35	8	84	7.84	82.35	
31.95- 32.15	5	76	4.90	74.51	
31.75- 31.95	3	71	2.94	69.61	
31.55- 31.75	4	68	3.92	66.67	
31.35- 31.55	8	64	7.84	62.75	
31.15- 31.35	3	56	2.94	54.90	
30.95- 31.15	8	53	7.84	51.96	
30.75- 30.95	5	45	4.90	44.12	
30.55- 30.75	3	40	2.94	39.22	
30.35- 30.55	8	37	7.84	36.27	
30.15- 30.35	2	29	1.96	28.43	
29.95- 30.15	7	27	6.86	26.47	
29.75- 29.95	3	20	2.94	19.61	
29.55- 29.75	2	17	1.96	16.67	
29.35- 29.55	5	15	4.90	14.71	
29.15- 29.35	3	10	2.94	9.80	
28.95- 29.15	2	7	1.96	6.86	
28.75- 28.95	0	5	0.00	4.90	
28.55- 28.75	4	5	3.92	4.90	
28.35- 28.55	0	1	0.00	.98	
28.15- 28.35	1	1	.98	.98	

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

5H BIT-SUBMANDBLR ARC				
RANGES	FRQ	CUMF	FRQX	CUMFX
31.75- 31.95	1	102	.98	100.00
31.55- 31.75	0	101	0.00	99.02
31.35- 31.55	0	101	0.00	99.02
31.15- 31.35	0	101	0.00	99.02
30.95- 31.15	0	101	0.00	99.02
30.75- 30.95	4	101	3.92	99.02
30.55- 30.75	2	97	1.96	95.10
30.35- 30.55	4	95	3.92	93.14
30.15- 30.35	4	91	3.92	89.22
29.95- 30.15	2	87	1.96	85.29
29.75- 29.95	5	85	4.90	83.33
29.55- 29.75	5	80	4.90	78.43
29.35- 29.55	3	75	2.94	73.53
29.15- 29.35	6	72	5.88	70.59
28.95- 29.15	7	66	6.86	64.71
28.75- 28.95	6	59	5.88	57.84
28.55- 28.75	6	53	5.88	51.96
28.35- 28.55	5	47	4.90	46.08
28.15- 28.35	5	42	4.90	41.18
27.95- 28.15	3	37	2.94	36.27
27.75- 27.95	3	34	2.94	33.33
27.55- 27.75	2	31	1.96	30.39
27.35- 27.55	9	29	8.82	28.43
27.15- 27.35	5	20	4.90	19.61
26.95- 27.15	4	15	3.92	14.71
26.75- 26.95	4	11	3.92	10.78
26.55- 26.75	4	7	3.92	6.86
26.35- 26.55	1	3	.98	2.94
26.15- 26.35	1	2	.98	1.96
25.95- 26.15	0	1	0.00	.98
25.75- 25.95	1	1	.98	.98

6H GLABELLA TO WALL				
RANGES	FRQ	CUMF	FRQX	CUMFX
21.65- 21.75	1	102	.98	100.00
21.55- 21.65	0	101	0.00	99.02
21.45- 21.55	1	101	.98	99.02
21.35- 21.45	0	100	0.00	98.04
21.25- 21.35	0	100	0.00	98.04
21.15- 21.25	0	100	0.00	98.04
21.05- 21.15	0	100	0.00	98.04
20.95- 21.05	3	100	2.94	98.04
20.85- 20.95	2	97	1.96	95.10
20.75- 20.85	2	95	1.96	93.14
20.65- 20.75	2	93	1.96	91.18
20.55- 20.65	0	91	0.00	89.22
20.45- 20.55	3	91	2.94	89.22
20.35- 20.45	2	88	1.96	86.27
20.25- 20.35	1	86	.98	84.31
20.15- 20.25	4	85	3.92	83.33
20.05- 20.15	2	81	1.96	79.41
19.95- 20.05	1	79	.98	77.45
19.85- 19.95	3	78	2.94	76.47
19.75- 19.85	8	75	7.84	73.53
19.65- 19.75	8	67	7.84	65.69
19.55- 19.65	8	59	7.84	57.84
19.45- 19.55	8	51	7.84	50.00
19.35- 19.45	9	43	8.82	42.16
19.25- 19.35	4	34	3.92	33.33
19.15- 19.25	8	30	7.84	29.41
19.05- 19.15	6	22	5.88	21.57
18.95- 19.05	1	16	.98	15.69
18.85- 18.95	3	15	2.94	14.71
18.75- 18.85	2	12	1.96	11.76
18.65- 18.75	1	10	.98	9.80
18.55- 18.65	0	9	0.00	8.82
18.45- 18.55	4	9	3.92	8.82
18.35- 18.45	1	5	.98	4.90
18.25- 18.35	1	4	.98	3.92
18.15- 18.25	1	3	.98	2.94
18.05- 18.15	1	2	.98	1.96
17.95- 18.05	0	1	0.00	.98
17.85- 17.95	1	1	.98	.98

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

7H SELLION TO WALL				
RANGES	FRQ	CUMF	FRQX	CUMFX
21.55- 21.65	1	102	.98	100.00
21.45- 21.55	1	101	.98	99.02
21.35- 21.45	0	100	0.00	98.04
21.25- 21.35	0	100	0.00	98.04
21.15- 21.25	0	100	0.00	98.04
21.05- 21.15	1	100	.98	98.04
20.95- 21.05	0	99	0.00	97.06
20.85- 20.95	1	99	.98	97.06
20.75- 20.85	1	98	.96	96.08
20.65- 20.75	1	97	.98	95.10
20.55- 20.65	2	96	1.96	94.12
20.45- 20.55	1	94	.98	92.16
20.35- 20.45	3	93	2.94	91.18
20.25- 20.35	1	90	.98	88.24
20.15- 20.25	2	89	1.96	87.25
20.05- 20.15	1	87	.98	85.29
19.95- 20.05	0	86	5.88	84.31
19.85- 19.95	4	80	3.92	78.43
19.75- 19.85	3	76	2.94	74.51
19.65- 19.75	8	73	7.84	71.57
19.55- 19.65	6	65	5.88	63.73
19.45- 19.55	9	59	8.82	57.84
19.35- 19.45	8	50	7.84	49.02
19.25- 19.35	8	42	7.84	41.18
19.15- 19.25	6	34	5.88	33.33
19.05- 19.15	2	28	1.96	27.45
18.95- 19.05	7	26	6.86	25.49
18.85- 18.95	1	19	.98	18.63
18.75- 18.85	6	18	5.88	17.65
18.65- 18.75	2	12	1.96	11.76
18.55- 18.65	1	10	.98	9.80
18.45- 18.55	2	9	1.96	8.82
18.35- 18.45	2	7	1.96	6.86
18.25- 18.35	1	5	.98	4.90
18.15- 18.25	1	4	.98	3.92
18.05- 18.15	0	3	0.00	2.94
17.95- 18.05	1	3	.98	2.94
17.85- 17.95	1	2	.98	1.96
17.75- 17.85	0	1	0.00	.98
17.65- 17.75	1	1	.98	.98

8H PRONASALE TO WALL				
RANGES	FRQ	CUMF	FRQX	CUMFX
24.25- 24.35	1	102	.98	100.00
24.15- 24.25	0	101	0.00	99.02
24.05- 24.15	0	101	0.00	99.02
23.95- 24.05	0	101	0.00	99.02
23.85- 23.95	1	101	.98	99.02
23.75- 23.85	0	100	0.00	98.04
23.65- 23.75	2	100	1.96	98.04
23.55- 23.65	0	98	0.00	96.08
23.45- 23.55	0	98	0.00	96.08
23.35- 23.45	1	98	.98	96.08
23.25- 23.35	2	97	1.96	95.10
23.15- 23.25	4	95	3.92	93.14
23.05- 23.15	1	91	.98	89.22
22.95- 23.05	6	90	5.88	88.24
22.85- 22.95	3	84	2.94	82.35
22.75- 22.85	5	81	4.90	79.41
22.65- 22.75	5	76	4.90	74.51
22.55- 22.65	1	71	.98	69.61
22.45- 22.55	2	70	1.96	68.63
22.35- 22.45	4	68	3.92	66.67
22.25- 22.35	10	64	9.80	62.75
22.15- 22.25	4	54	3.92	52.94
22.05- 22.15	1	50	.98	49.02
21.95- 22.05	13	49	12.75	48.04
21.85- 21.95	6	36	5.88	35.29
21.75- 21.85	5	30	4.90	29.41
21.65- 21.75	1	25	.98	24.51
21.55- 21.65	2	24	1.96	23.53
21.45- 21.55	6	22	5.88	21.57
21.35- 21.45	4	16	3.92	15.69
21.25- 21.35	3	12	2.94	11.76
21.15- 21.25	3	9	2.94	8.82
21.05- 21.15	0	6	0.00	5.88
20.95- 21.05	1	6	.98	5.88
20.85- 20.95	1	5	.98	4.90
20.75- 20.85	1	4	.98	3.92
20.65- 20.75	2	3	1.96	2.94
20.55- 20.65	0	1	0.00	.98
20.45- 20.55	0	1	0.00	.98
20.35- 20.45	0	1	0.00	.98
20.25- 20.35	0	1	0.00	.98
20.15- 20.25	0	1	0.00	.98
20.05- 20.15	1	1	.98	.98

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

9H SUBNASALE TO WALL

RANGES	FRQ	CUMF	FRQ%	CUMF%
23.25- 23.35	1	102	.98	100.00
23.15- 23.25	0	101	0.00	99.02
23.05- 23.15	0	101	0.00	99.02
22.95- 23.05	1	101	.98	99.02
22.85- 22.95	0	100	0.00	98.04
22.75- 22.85	0	100	0.00	98.04
22.65- 22.75	1	100	.98	98.04
22.55- 22.65	0	99	0.00	97.06
22.45- 22.55	0	99	0.00	97.06
22.35- 22.45	0	99	0.00	97.06
22.25- 22.35	3	99	2.94	97.06
22.15- 22.25	1	96	.98	94.12
22.05- 22.15	0	95	0.00	93.14
21.95- 22.05	1	95	.98	93.14
21.85- 21.95	2	94	1.96	92.16
21.75- 21.85	1	92	.98	90.20
21.65- 21.75	2	91	1.96	89.22
21.55- 21.65	5	89	4.90	87.25
21.45- 21.55	5	84	4.90	82.35
21.35- 21.45	3	79	2.94	77.45
21.25- 21.35	2	76	1.96	74.51
21.15- 21.25	5	74	4.90	72.55
21.05- 21.15	5	69	4.90	67.65
20.95- 21.05	5	64	4.90	62.75
20.85- 20.95	7	59	6.86	57.84
20.75- 20.85	4	52	3.92	50.98
20.65- 20.75	7	48	6.86	47.06
20.55- 20.65	8	41	7.84	40.20
20.45- 20.55	5	33	4.90	32.35
20.35- 20.45	5	28	4.90	27.45
20.25- 20.35	2	23	1.96	22.55
20.15- 20.25	3	21	2.94	20.59
20.05- 20.15	4	18	3.92	17.65
19.95- 20.05	3	14	2.94	13.73
19.85- 19.95	3	11	2.94	10.78
19.75- 19.85	0	8	0.00	7.84
19.65- 19.75	0	8	0.00	7.84
19.55- 19.65	4	8	3.92	7.84
19.45- 19.55	0	4	0.00	3.92
19.35- 19.45	1	4	.98	3.92
19.25- 19.35	2	3	1.96	2.94
19.15- 19.25	1	1	.98	.98

10H LIP PROTRUSION-WALL

RANGES	FRQ	CUMF	FRQ%	CUMF%
23.75- 23.95	1	102	.98	100.00
23.55- 23.75	1	101	.98	99.02
23.35- 23.55	1	100	.98	98.04
23.15- 23.35	0	99	0.00	97.06
22.95- 23.15	1	99	.98	97.06
22.75- 22.95	1	98	.98	96.08
22.55- 22.75	1	97	.98	95.10
22.35- 22.55	2	96	1.96	94.12
22.15- 22.35	3	94	2.94	92.16
21.95- 22.15	3	91	2.94	89.22
21.75- 21.95	5	88	4.90	86.27
21.55- 21.75	5	83	4.90	81.37
21.35- 21.55	7	78	6.86	76.47
21.15- 21.35	6	71	5.88	69.61
20.95- 21.15	10	65	9.80	63.73
20.75- 20.95	12	55	11.76	53.92
20.55- 20.75	7	43	6.86	42.16
20.35- 20.55	3	36	2.94	35.29
20.15- 20.35	7	33	6.86	32.35
19.95- 20.15	8	26	7.84	25.49
19.75- 19.95	6	18	5.88	17.65
19.55- 19.75	5	12	4.90	11.76
19.35- 19.55	4	7	3.92	6.86
19.15- 19.35	0	3	0.00	2.94
18.95- 19.15	2	3	1.96	2.94
18.75- 18.95	1	1	.98	.98

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

11H MENTON TO WALL						12H ECTOCANTHUS-WALL					
RANGES		FRQ	CUMF	FRQX	CUMFX	RANGES		FRQ	CUMF	FRQX	CUMFX
23.55- 23.75	1	102	.98	100.00		19.45- 19.55	2	102	1.96	100.00	
23.35- 23.55	0	101	0.00	99.02		19.35- 19.45	0	100	0.00	98.04	
23.15- 23.35	0	101	0.00	99.02		19.25- 19.35	0	100	0.00	98.04	
22.95- 23.15	1	101	.98	99.02		19.15- 19.25	0	100	0.00	98.04	
22.75- 22.95	0	100	0.00	98.04		19.05- 19.15	0	100	0.00	98.04	
22.55- 22.75	1	100	.98	98.04		18.95- 19.05	2	100	1.96	98.04	
22.35- 22.55	1	99	.98	97.06		18.85- 18.95	0	98	0.00	96.08	
22.15- 22.35	3	98	2.94	96.08		18.75- 18.85	2	98	1.96	96.08	
21.95- 22.15	1	95	.98	93.14		18.65- 18.75	2	96	1.96	94.12	
21.75- 21.95	2	94	1.96	92.16		18.55- 18.65	1	94	.98	92.16	
21.55- 21.75	3	92	2.94	90.20		18.45- 18.55	1	93	.98	91.18	
21.35- 21.55	1	89	.98	87.25		18.35- 18.45	1	92	.98	90.20	
21.15- 21.35	0	88	0.00	86.27		18.25- 18.35	1	91	.98	89.22	
20.95- 21.15	10	88	9.80	86.27		18.15- 18.25	3	90	2.94	88.24	
20.75- 20.95	11	78	10.78	76.47		18.05- 18.15	4	87	3.92	85.29	
20.55- 20.75	7	67	6.86	65.69		17.95- 18.05	8	83	7.84	81.37	
20.35- 20.55	2	60	1.96	58.82		17.85- 17.95	4	75	3.92	73.53	
20.15- 20.35	6	58	5.88	56.86		17.75- 17.85	6	71	5.88	69.61	
19.95- 20.15	6	52	5.88	50.98		17.65- 17.75	8	65	7.84	63.73	
19.75- 19.95	8	46	7.84	45.10		17.55- 17.65	5	57	4.90	55.88	
19.55- 19.75	5	38	4.90	37.25		17.45- 17.55	6	52	5.88	50.98	
19.35- 19.55	9	33	8.82	32.35		17.35- 17.45	5	46	4.90	45.10	
19.15- 19.35	7	24	6.86	23.53		17.25- 17.35	6	41	5.88	40.20	
18.95- 19.15	3	17	2.94	16.67		17.15- 17.25	5	35	4.90	34.31	
18.75- 18.95	7	14	6.86	13.73		17.05- 17.15	2	30	1.96	29.41	
18.55- 18.75	3	7	2.94	6.86		16.95- 17.05	5	28	4.90	27.45	
18.35- 18.55	2	4	1.96	3.92		16.85- 16.95	3	23	2.94	22.55	
18.15- 18.35	1	2	.98	1.96		16.75- 16.85	4	20	3.92	19.61	
17.95- 18.15	0	1	0.00	.98		16.65- 16.75	2	16	1.96	15.69	
17.75- 17.95	0	1	0.00	.98		16.55- 16.65	3	14	2.94	13.73	
17.55- 17.75	1	1	.98	.98		16.45- 16.55	1	11	.98	10.78	
						16.35- 16.45	2	10	1.96	9.80	
						16.25- 16.35	4	8	3.92	7.84	
						16.15- 16.25	1	4	.98	3.92	
						16.05- 16.15	0	3	0.00	2.94	
						15.95- 16.05	1	3	.98	2.94	
						15.85- 15.95	0	2	0.00	1.96	
						15.75- 15.85	2	2	1.96	1.96	

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

13H TRAGION TO WALL					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
11.95- 12.05	1	102	.98	100.00	
11.85- 11.95	1	101	.98	99.02	
11.75- 11.85	1	100	.98	98.04	
11.65- 11.75	1	99	.98	97.06	
11.55- 11.65	1	98	.98	96.08	
11.45- 11.55	1	97	.98	95.10	
11.35- 11.45	3	96	2.94	94.12	
11.25- 11.35	3	93	2.94	91.18	
11.15- 11.25	2	90	1.96	88.24	
11.05- 11.15	2	88	1.96	86.27	
10.95- 11.05	3	86	2.94	84.31	
10.85- 10.95	1	83	.98	81.37	
10.75- 10.85	7	82	6.86	80.39	
10.65- 10.75	5	75	4.90	73.53	
10.55- 10.65	3	70	2.94	68.63	
10.45- 10.55	4	67	3.92	65.69	
10.35- 10.45	10	63	9.80	61.76	
10.25- 10.35	7	53	6.86	51.96	
10.15- 10.25	6	46	5.88	45.10	
10.05- 10.15	7	40	6.86	39.22	
9.95- 10.05	5	33	4.90	32.35	
9.85- 9.95	4	28	3.92	27.45	
9.75- 9.85	2	24	1.96	23.53	
9.65- 9.75	6	22	5.88	21.57	
9.55- 9.65	2	16	1.96	15.69	
9.45- 9.55	1	14	.98	13.73	
9.35- 9.45	4	13	3.92	12.75	
9.25- 9.35	4	9	3.92	8.82	
9.15- 9.25	0	5	0.00	4.90	
9.05- 9.15	1	5	.98	4.90	
8.95- 9.05	1	4	.98	3.92	
8.85- 8.95	1	3	.98	2.94	
8.75- 8.85	1	2	.98	1.96	
8.65- 8.75	0	1	0.00	.98	
8.55- 8.65	0	1	0.00	.98	
8.45- 8.55	0	1	0.00	.98	
8.35- 8.45	0	1	0.00	.98	
8.25- 8.35	0	1	0.00	.98	
8.15- 8.25	1	1	.98	.98	

14H BITRAGION BREADTH					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
14.85- 14.95	2	102	1.96	100.00	
14.75- 14.85	0	100	0.00	98.04	
14.65- 14.75	1	100	.98	98.04	
14.55- 14.65	1	99	.98	97.06	
14.45- 14.55	1	98	.98	96.08	
14.35- 14.45	1	97	.98	95.10	
14.25- 14.35	3	96	2.94	94.12	
14.15- 14.25	5	93	4.90	91.18	
14.05- 14.15	2	88	1.96	88.24	
13.95- 14.05	8	86	7.84	84.31	
13.85- 13.95	8	78	7.84	76.47	
13.75- 13.85	4	70	3.92	68.63	
13.65- 13.75	8	66	7.84	64.71	
13.55- 13.65	3	58	2.94	56.86	
13.45- 13.55	10	55	9.80	53.92	
13.35- 13.45	7	45	6.86	44.12	
13.25- 13.35	3	38	2.94	37.25	
13.15- 13.25	7	35	6.86	34.31	
13.05- 13.15	5	28	4.90	27.45	
12.95- 13.05	4	23	3.92	22.55	
12.85- 12.95	4	19	3.92	18.63	
12.75- 12.85	2	15	1.96	14.71	
12.65- 12.75	4	13	3.92	12.75	
12.55- 12.65	2	9	1.96	8.82	
12.45- 12.55	4	7	3.92	6.86	
12.35- 12.45	1	3	.98	2.94	
12.25- 12.35	1	2	.98	1.96	
12.15- 12.25	0	1	0.00	.98	
12.05- 12.15	1	1	.98	.98	

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

15H HEAD HT/TRAGN-VRTX				
RANGES	FRQ	CUMF	FRQ%	CUMF%
15.35- 15.45	1	102	.98	100.00
15.25- 15.35	0	101	0.00	99.02
15.15- 15.25	0	101	0.00	99.02
15.05- 15.15	1	101	.98	99.02
14.95- 15.05	0	100	0.00	98.04
14.85- 14.95	0	100	0.00	98.04
14.75- 14.85	0	100	0.00	98.04
14.65- 14.75	0	100	0.00	98.04
14.55- 14.65	3	100	2.94	98.04
14.45- 14.55	3	97	2.94	95.10
14.35- 14.45	1	94	.98	92.16
14.25- 14.35	1	93	.98	91.18
14.15- 14.25	1	92	.98	90.20
14.05- 14.15	1	91	.98	89.22
13.95- 14.05	5	90	4.90	88.24
13.85- 13.95	5	85	4.90	83.33
13.75- 13.85	7	80	6.86	78.43
13.65- 13.75	6	73	5.88	71.57
13.55- 13.65	5	67	4.90	65.69
13.45- 13.55	10	62	9.80	60.78
13.35- 13.45	3	52	2.94	50.98
13.25- 13.35	9	49	8.82	48.04
13.15- 13.25	4	40	3.92	39.22
13.05- 13.15	5	36	4.90	35.29
12.95- 13.05	9	31	8.82	30.39
12.85- 12.95	4	22	3.92	21.57
12.75- 12.85	5	18	4.90	17.65
12.65- 12.75	0	13	0.00	12.75
12.55- 12.65	0	13	0.00	12.75
12.45- 12.55	2	13	1.96	12.75
12.35- 12.45	1	11	.98	10.78
12.25- 12.35	5	10	4.90	9.80
12.15- 12.25	2	5	1.96	4.90
12.05- 12.15	0	3	0.00	2.94
11.95- 12.05	1	3	.98	2.94
11.85- 11.95	1	2	.98	1.96
11.75- 11.85	0	1	0.00	.98
11.65- 11.75	0	1	0.00	.98
11.55- 11.65	0	1	0.00	.98
11.45- 11.55	1	1	.98	.98

16H ECTOCANTHUS-VERTEX				
RANGES	FRQ	CUMF	FRQ%	CUMF%
13.25- 13.35	1	102	.98	100.00
13.15- 13.25	0	101	0.00	99.02
13.05- 13.15	0	101	0.00	99.02
12.95- 13.05	1	101	.98	99.02
12.85- 12.95	0	100	0.00	98.04
12.75- 12.85	1	100	.98	98.04
12.65- 12.75	1	99	.98	97.06
12.55- 12.65	0	98	0.00	96.08
12.45- 12.55	0	98	0.00	96.08
12.35- 12.45	2	98	1.96	96.08
12.25- 12.35	1	96	.98	94.12
12.15- 12.25	1	95	.98	93.14
12.05- 12.15	1	94	.98	92.16
11.95- 12.05	2	93	1.96	91.18
11.85- 11.95	2	91	1.96	89.22
11.75- 11.85	2	89	1.96	87.25
11.65- 11.75	9	87	8.82	85.29
11.55- 11.65	5	78	4.90	76.47
11.45- 11.55	3	73	2.94	71.57
11.35- 11.45	6	70	5.88	68.63
11.25- 11.35	3	64	2.94	62.75
11.15- 11.25	2	61	1.96	59.80
11.05- 11.15	1	59	.98	57.84
10.95- 11.05	6	58	5.88	56.86
10.85- 10.95	9	52	8.82	50.98
10.75- 10.85	4	43	3.92	42.16
10.65- 10.75	7	39	6.86	38.24
10.55- 10.65	3	32	2.94	31.37
10.45- 10.55	7	29	6.86	28.43
10.35- 10.45	3	22	2.94	21.57
10.25- 10.35	6	19	5.88	18.63
10.15- 10.25	1	13	.98	12.75
10.05- 10.15	1	12	.98	11.76
9.95- 10.05	1	11	.98	10.78
9.85- 9.95	4	10	3.92	9.80
9.75- 9.85	1	6	.98	5.88
9.65- 9.75	3	5	2.94	4.90
9.55- 9.65	0	2	0.00	1.96
9.45- 9.55	1	2	.98	1.96
9.35- 9.45	0	1	0.00	.98
9.25- 9.35	0	1	0.00	.98
9.15- 9.25	0	1	0.00	.98
9.05- 9.15	0	1	0.00	.98
8.95- 9.05	0	1	0.00	.98
8.85- 8.95	1	1	.98	.98

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

17H GLABELLA TO VERTEX					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
9.75- 9.85	1	102	.98	100.00	
9.65- 9.75	1	101	.98	99.02	
9.55- 9.65	0	100	0.00	98.04	
9.45- 9.55	0	100	0.00	98.04	
9.35- 9.45	3	100	2.94	98.04	
9.25- 9.35	2	97	1.96	95.10	
9.15- 9.25	3	95	2.94	93.14	
9.05- 9.15	0	92	0.00	90.20	
8.95- 9.05	2	92	1.96	90.20	
8.85- 8.95	4	90	3.92	88.24	
8.75- 8.85	2	86	1.96	84.31	
8.65- 8.75	6	84	5.88	82.35	
8.55- 8.65	2	78	1.96	76.47	
8.45- 8.55	2	76	1.96	74.51	
8.35- 8.45	5	74	4.90	72.55	
8.25- 8.35	3	69	2.94	67.65	
8.15- 8.25	2	66	1.96	64.71	
8.05- 8.15	3	64	2.94	62.75	
7.95- 8.05	9	61	8.82	59.80	
7.85- 7.95	4	52	3.92	50.98	
7.75- 7.85	4	48	3.92	47.06	
7.65- 7.75	2	44	1.96	43.14	
7.55- 7.65	6	42	5.88	41.18	
7.45- 7.55	2	36	1.96	35.29	
7.35- 7.45	5	34	4.90	33.33	
7.25- 7.35	4	29	3.92	28.43	
7.15- 7.25	3	25	2.94	24.51	
7.05- 7.15	2	22	1.96	21.57	
6.95- 7.05	4	20	3.92	19.61	
6.85- 6.95	5	16	4.90	15.69	
6.75- 6.85	2	11	1.96	10.78	
6.65- 6.75	2	9	1.96	8.82	
6.55- 6.65	1	7	.98	6.86	
6.45- 6.55	2	6	1.96	5.88	
6.35- 6.45	3	4	2.94	3.92	
6.25- 6.35	0	1	0.00	.98	
6.15- 6.25	0	1	0.00	.98	
6.05- 6.15	0	1	0.00	.98	
5.95- 6.05	0	1	0.00	.98	
5.85- 5.95	1	1	.98	.98	

18H SELLION TO VERTEX					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
12.45- 12.55	1	102	.98	100.00	
12.35- 12.45	0	101	0.00	99.02	
12.25- 12.35	0	101	0.00	99.02	
12.15- 12.25	0	101	0.00	99.02	
12.05- 12.15	0	101	0.00	99.02	
11.95- 12.05	0	101	0.00	99.02	
11.85- 11.95	0	101	0.00	99.02	
11.75- 11.85	1	101	.98	99.02	
11.65- 11.75	1	100	.98	98.04	
11.55- 11.65	0	99	0.00	97.06	
11.45- 11.55	1	99	.98	97.06	
11.35- 11.45	1	98	.98	96.08	
11.25- 11.35	1	97	.98	95.10	
11.15- 11.25	2	96	1.96	94.12	
11.05- 11.15	1	94	.98	92.16	
10.95- 11.05	2	93	1.96	91.18	
10.85- 10.95	0	91	0.00	89.22	
10.75- 10.85	5	91	4.90	89.22	
10.65- 10.75	0	86	0.00	84.31	
10.55- 10.65	5	86	4.90	84.31	
10.45- 10.55	0	81	0.00	79.41	
10.35- 10.45	4	81	3.92	79.41	
10.25- 10.35	3	77	2.94	75.49	
10.15- 10.25	1	74	.98	72.55	
10.05- 10.15	3	73	2.94	71.57	
9.95- 10.05	8	70	7.84	68.63	
9.85- 9.95	9	62	8.82	60.78	
9.75- 9.85	1	53	.98	51.96	
9.65- 9.75	4	52	3.92	50.98	
9.55- 9.65	3	48	2.94	47.06	
9.45- 9.55	0	45	0.00	44.12	
9.35- 9.45	3	45	2.94	44.12	
9.25- 9.35	6	42	5.88	41.18	
9.15- 9.25	1	36	.98	35.29	
9.05- 9.15	3	35	2.94	34.31	
8.95- 9.05	5	32	4.90	31.37	
8.85- 8.95	1	27	.98	26.47	
8.75- 8.85	3	26	2.94	25.49	
8.65- 8.75	5	23	4.90	22.55	
8.55- 8.65	1	18	.98	17.65	
8.45- 8.55	3	17	2.94	16.67	
8.35- 8.45	2	14	1.96	13.73	
8.25- 8.35	3	12	2.94	11.76	
8.15- 8.25	4	9	3.92	8.82	
8.05- 8.15	1	5	.98	4.90	
7.95- 8.05	2	4	1.96	3.92	
7.85- 7.95	1	2	.98	1.96	
7.75- 7.85	1	1	.98	.98	

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

19H PRONASALE TO VERTX				
RANGES	FRQ	CUMF	FRQX	CUMFX
16.15- 16.35	1	102	.98	100.00
15.95- 16.15	0	101	0.00	99.02
15.75- 15.95	0	101	0.00	99.02
15.55- 15.75	1	101	.98	99.02
15.35- 15.55	1	100	.98	98.04
15.15- 15.35	1	99	.98	97.06
14.95- 15.15	2	98	1.96	96.08
14.75- 14.95	2	96	1.96	94.12
14.55- 14.75	4	94	3.92	92.16
14.35- 14.55	1	90	.98	88.24
14.15- 14.35	7	89	6.86	87.25
13.95- 14.15	2	82	1.96	80.39
13.75- 13.95	5	80	4.90	78.43
13.55- 13.75	7	75	6.86	73.53
13.35- 13.55	5	68	4.90	66.67
13.15- 13.35	7	63	6.86	61.76
12.95- 13.15	10	56	9.80	54.90
12.75- 12.95	7	46	6.86	45.10
12.55- 12.75	4	39	3.92	38.24
12.35- 12.55	11	35	10.76	34.31
12.15- 12.35	6	24	5.88	23.53
11.95- 12.15	4	18	3.92	17.65
11.75- 11.95	7	14	6.86	13.73
11.55- 11.75	2	7	1.96	6.86
11.35- 11.55	2	5	1.96	4.90
11.15- 11.35	2	3	1.96	2.94
10.95- 11.15	0	1	0.00	.98
10.75- 10.95	1	1	.98	.98

20H SUBNASALE TO VERTX				
RANGES	FRQ	CUMF	FRQX	CUMFX
17.15- 17.35	1	102	.98	100.00
16.95- 17.15	0	101	0.00	99.02
16.75- 16.95	0	101	0.00	99.02
16.55- 16.75	0	101	0.00	99.02
16.35- 16.55	2	101	1.96	99.02
16.15- 16.35	2	99	1.96	97.06
15.95- 16.15	1	97	.98	95.10
15.75- 15.95	5	96	4.90	94.12
15.55- 15.75	4	91	3.92	89.22
15.35- 15.55	7	87	6.86	85.29
15.15- 15.35	5	80	4.90	78.43
14.95- 15.15	3	75	2.94	73.53
14.75- 14.95	8	72	7.84	70.59
14.55- 14.75	8	64	7.84	62.75
14.35- 14.55	10	56	9.80	54.90
14.15- 14.35	8	46	7.84	45.10
13.95- 14.15	6	38	5.88	37.25
13.75- 13.95	7	32	6.86	31.37
13.55- 13.75	7	25	6.86	24.51
13.35- 13.55	4	18	3.92	17.65
13.15- 13.35	8	14	7.84	13.73
12.95- 13.15	2	6	1.96	5.88
12.75- 12.95	2	4	1.96	3.92
12.55- 12.75	0	2	0.00	1.96
12.35- 12.55	1	2	.98	1.96
12.15- 12.35	1	1	.98	.98

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

21H STOMION TO VERTEX				
RANGES	FRQ	CUMF	FRQX	CUMFX
19.35- 19.55	1	102	.98	100.00
19.15- 19.35	0	101	0.00	99.02
18.95- 19.15	1	101	.98	99.02
18.75- 18.95	3	100	2.94	98.04
18.55- 18.75	1	97	.98	95.10
18.35- 18.55	4	96	3.92	94.12
18.15- 18.35	1	92	.98	90.20
17.95- 18.15	4	91	3.92	89.22
17.75- 17.95	6	87	5.88	85.29
17.55- 17.75	4	81	3.92	79.41
17.35- 17.55	5	77	4.90	75.49
17.15- 17.35	8	72	7.84	70.59
16.95- 17.15	8	64	7.84	62.75
16.75- 16.95	4	56	3.92	54.90
16.55- 16.75	8	52	7.84	50.98
16.35- 16.55	9	44	8.82	43.14
16.15- 16.35	11	35	10.78	34.31
15.95- 16.15	7	24	6.86	23.53
15.75- 15.95	4	17	3.92	16.67
15.55- 15.75	5	13	4.90	12.75
15.35- 15.55	3	8	2.94	7.84
15.15- 15.35	2	5	1.96	4.90
14.95- 15.15	1	3	.98	2.94
14.75- 14.95	1	2	.98	1.96
14.55- 14.75	0	1	0.00	.98
14.35- 14.55	1	1	.98	.98

22H MENTON TO VERTEX				
RANGES	FRQ	CUMF	FRQX	CUMFX
23.95- 24.15	1	102	.98	100.00
23.75- 23.95	1	101	.98	99.02
23.55- 23.75	0	100	0.00	98.04
23.35- 23.55	3	100	2.94	98.04
23.15- 23.35	0	97	0.00	95.10
22.95- 23.15	3	97	2.94	95.10
22.75- 22.95	2	94	1.96	92.16
22.55- 22.75	2	92	1.96	90.20
22.35- 22.55	4	90	3.92	88.24
22.15- 22.35	4	86	3.92	84.31
21.95- 22.15	7	82	6.86	80.39
21.75- 21.95	4	75	3.92	73.53
21.55- 21.75	4	71	3.92	69.61
21.35- 21.55	13	67	12.75	65.69
21.15- 21.35	12	54	11.76	52.94
20.95- 21.15	4	42	3.92	41.18
20.75- 20.95	5	38	4.90	37.25
20.55- 20.75	9	33	8.82	32.35
20.35- 20.55	5	24	4.90	23.53
20.15- 20.35	8	19	7.84	18.63
19.95- 20.15	5	11	4.90	10.78
19.75- 19.95	4	6	3.92	5.88
19.55- 19.75	0	2	0.00	1.96
19.35- 19.55	0	2	0.00	1.96
19.15- 19.35	1	2	.98	1.96
18.95- 19.15	1	1	.98	.98

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

23H FACE LENGTH					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
13.15- 13.25	1	102	.98	100.00	
13.05- 13.15	1	101	.98	99.02	
12.95- 13.05	2	100	1.96	98.04	
12.85- 12.95	2	98	1.96	96.08	
12.75- 12.85	3	96	2.94	94.12	
12.65- 12.75	1	93	.98	91.18	
12.55- 12.65	2	92	1.96	90.20	
12.45- 12.55	5	90	4.90	88.24	
12.35- 12.45	2	85	1.96	83.33	
12.25- 12.35	3	83	2.94	81.37	
12.15- 12.25	3	80	2.94	78.43	
12.05- 12.15	3	77	2.94	75.49	
11.95- 12.05	8	74	7.84	72.55	
11.85- 11.95	5	66	4.90	64.71	
11.75- 11.85	6	61	5.88	59.80	
11.65- 11.75	5	55	4.90	53.92	
11.55- 11.65	9	50	8.82	49.02	
11.45- 11.55	4	41	3.92	40.20	
11.35- 11.45	4	37	3.92	36.27	
11.25- 11.35	6	33	5.88	32.35	
11.15- 11.25	4	27	3.92	26.47	
11.05- 11.15	7	23	6.86	22.55	
10.95- 11.05	6	16	5.88	15.69	
10.85- 10.95	1	10	.98	9.80	
10.75- 10.85	0	9	0.00	8.82	
10.65- 10.75	2	9	1.96	8.82	
10.55- 10.65	1	7	.98	6.86	
10.45- 10.55	1	6	.98	5.88	
10.35- 10.45	4	5	3.92	4.90	
10.25- 10.35	0	1	0.00	.98	
10.15- 10.25	1	1	.98	.98	

24H CRINION-MENTON					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
20.65- 20.75	1	102	.98	100.00	
20.55- 20.65	1	101	.98	99.02	
20.45- 20.55	0	100	0.00	98.04	
20.35- 20.45	1	100	.98	98.04	
20.25- 20.35	1	99	.98	97.06	
20.15- 20.25	0	98	0.00	96.08	
20.05- 20.15	0	98	0.00	96.08	
19.95- 20.05	0	98	0.00	96.08	
19.85- 19.95	0	98	0.00	96.08	
19.75- 19.85	2	98	1.96	96.08	
19.65- 19.75	2	96	1.96	94.12	
19.55- 19.65	1	94	.98	92.16	
19.45- 19.55	3	93	2.94	91.18	
19.35- 19.45	4	90	3.92	88.24	
19.25- 19.35	4	86	3.92	84.31	
19.15- 19.25	2	82	1.96	80.39	
19.05- 19.15	4	80	3.92	78.43	
18.95- 19.05	6	76	5.88	74.51	
18.85- 18.95	4	70	3.92	68.63	
18.75- 18.85	5	66	4.90	64.71	
18.65- 18.75	5	61	4.90	59.80	
18.55- 18.65	4	56	3.92	54.90	
18.45- 18.55	2	52	1.96	50.98	
18.35- 18.45	11	50	10.78	49.02	
18.25- 18.35	4	39	3.92	38.24	
18.15- 18.25	4	35	3.92	34.31	
18.05- 18.15	5	31	4.90	30.39	
17.95- 18.05	4	26	3.92	25.49	
17.85- 17.95	3	22	2.94	21.57	
17.75- 17.85	1	19	.98	18.63	
17.65- 17.75	0	18	0.00	17.65	
17.55- 17.65	3	18	2.94	17.65	
17.45- 17.55	3	15	2.94	14.71	
17.35- 17.45	4	12	3.92	11.76	
17.25- 17.35	0	8	0.00	7.84	
17.15- 17.25	1	8	.98	7.84	
17.05- 17.15	2	7	1.96	6.86	
16.95- 17.05	0	5	0.00	4.90	
16.85- 16.95	1	5	.98	4.90	
16.75- 16.85	1	4	.98	3.92	
16.65- 16.75	1	3	.98	2.94	
16.55- 16.65	1	2	.98	1.96	
16.45- 16.55	1	1	.98	.98	

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

25H MINIMUM FRONTAL BR					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
12.65- 12.75	1	102	.98	100.00	
12.55- 12.65	0	101	0.00	99.02	
12.45- 12.55	2	101	1.96	99.02	
12.35- 12.45	2	99	1.96	97.06	
12.25- 12.35	3	97	2.94	95.10	
12.15- 12.25	3	94	2.94	92.16	
12.05- 12.15	6	91	5.88	89.22	
11.95- 12.05	5	85	4.90	83.33	
11.85- 11.95	2	80	1.96	78.43	
11.75- 11.85	2	78	1.96	76.47	
11.65- 11.75	2	76	1.96	74.51	
11.55- 11.65	6	74	5.88	72.55	
11.45- 11.55	6	68	5.88	66.67	
11.35- 11.45	3	62	2.94	60.78	
11.25- 11.35	5	59	4.90	57.84	
11.15- 11.25	3	54	2.94	52.94	
11.05- 11.15	1	51	.98	50.00	
10.95- 11.05	7	50	6.86	49.02	
10.85- 10.95	3	43	2.94	42.16	
10.75- 10.85	5	40	4.90	39.22	
10.65- 10.75	7	35	6.86	34.31	
10.55- 10.65	1	28	.98	27.45	
10.45- 10.55	4	27	3.92	26.47	
10.35- 10.45	4	23	3.92	22.55	
10.25- 10.35	1	19	.98	18.63	
10.15- 10.25	4	18	3.92	17.65	
10.05- 10.15	4	14	3.92	13.73	
9.95- 10.05	4	10	3.92	9.80	
9.85- 9.95	1	6	.98	5.88	
9.75- 9.85	1	5	.98	4.90	
9.65- 9.75	0	4	0.00	3.92	
9.55- 9.65	1	4	.98	3.92	
9.45- 9.55	2	3	1.96	2.94	
9.35- 9.45	0	1	0.00	.98	
9.25- 9.35	0	1	0.00	.98	
9.15- 9.25	1	1	.98	.98	

26H FACE B/BIZYGOMATIC					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
14.75- 14.85	1	102	.98	100.00	
14.65- 14.75	2	101	1.96	99.02	
14.55- 14.65	1	99	.98	97.06	
14.45- 14.55	8	98	7.84	96.08	
14.35- 14.45	1	90	.98	88.24	
14.25- 14.35	4	89	3.92	87.25	
14.15- 14.25	5	85	4.90	83.33	
14.05- 14.15	6	80	5.88	78.43	
13.95- 14.05	12	74	11.76	72.55	
13.85- 13.95	9	62	8.82	60.78	
13.75- 13.85	7	53	6.86	51.96	
13.65- 13.75	8	46	7.84	45.10	
13.55- 13.65	4	38	3.92	37.25	
13.45- 13.55	7	34	6.86	33.33	
13.35- 13.45	6	27	5.88	26.47	
13.25- 13.35	4	21	3.92	20.59	
13.15- 13.25	3	17	2.94	16.67	
13.05- 13.15	4	14	3.92	13.73	
12.95- 13.05	1	10	.98	9.80	
12.85- 12.95	1	9	.98	8.82	
12.75- 12.85	2	8	1.96	7.84	
12.65- 12.75	2	6	1.96	5.88	
12.55- 12.65	3	4	2.94	3.92	
12.45- 12.55	1	1	.98	.98	

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

27H BIOGULAR BREADTH					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
11.35- 11.45	1	102	.98	100.00	
11.25- 11.35	0	101	0.00	99.02	
11.15- 11.25	1	101	.98	99.02	
11.05- 11.15	1	100	.98	98.04	
10.95- 11.05	0	99	0.00	97.06	
10.85- 10.95	4	99	3.92	97.06	
10.75- 10.85	5	95	4.90	93.14	
10.65- 10.75	1	90	.98	88.24	
10.55- 10.65	6	89	5.88	87.25	
10.45- 10.55	5	83	4.90	81.37	
10.35- 10.45	6	78	5.88	76.47	
10.25- 10.35	8	72	7.84	70.59	
10.15- 10.25	10	64	9.80	62.75	
10.05- 10.15	11	54	10.78	52.94	
9.95- 10.05	7	43	6.86	42.16	
9.85- 9.95	11	36	10.78	35.29	
9.75- 9.85	8	25	7.84	24.51	
9.65- 9.75	2	17	1.96	16.67	
9.55- 9.65	3	15	2.94	14.71	
9.45- 9.55	2	12	1.96	11.76	
9.35- 9.45	1	10	.98	9.80	
9.25- 9.35	1	9	.98	8.82	
9.15- 9.25	4	8	3.92	7.84	
9.05- 9.15	3	4	2.94	3.92	
8.95- 9.05	0	1	0.00	.98	
8.85- 8.95	0	1	0.00	.98	
8.75- 8.85	0	1	0.00	.98	
8.65- 8.75	1	1	.98	.98	

28H INTERPUILLARY DIS					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
7.25- 7.35	1	102	.98	100.00	
7.15- 7.25	0	101	0.00	99.02	
7.05- 7.15	1	101	.98	99.02	
6.95- 7.05	0	100	0.00	98.04	
6.85- 6.95	0	100	0.00	98.04	
6.75- 6.85	2	100	1.96	98.04	
6.65- 6.75	1	98	.98	96.08	
6.55- 6.65	1	97	.98	95.10	
6.45- 6.55	4	96	3.92	94.12	
6.35- 6.45	7	92	6.86	90.20	
6.25- 6.35	6	85	5.88	83.33	
6.15- 6.25	10	79	9.80	77.45	
6.05- 6.15	6	69	5.88	67.65	
5.95- 6.05	8	63	7.84	61.76	
5.85- 5.95	9	55	8.82	53.92	
5.75- 5.85	7	46	6.86	45.10	
5.65- 5.75	6	39	5.88	38.24	
5.55- 5.65	5	33	4.90	32.35	
5.45- 5.55	11	28	10.78	27.45	
5.35- 5.45	3	17	2.94	16.67	
5.25- 5.35	6	14	5.88	13.73	
5.15- 5.25	4	8	3.92	7.84	
5.05- 5.15	1	4	.98	3.92	
4.95- 5.05	0	3	0.00	2.94	
4.85- 4.95	0	3	0.00	2.94	
4.75- 4.85	1	3	.98	2.94	
4.65- 4.75	2	2	1.96	1.96	

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

29H NOSE LENGTH					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
5.75-	5.85	3	102	2.94	100.00
5.65-	5.75	2	99	1.96	97.06
5.55-	5.65	1	97	.98	95.10
5.45-	5.55	4	96	3.92	94.12
5.35-	5.45	7	92	6.86	90.20
5.25-	5.35	9	85	8.82	83.33
5.15-	5.25	3	76	2.94	74.51
5.05-	5.15	14	73	13.73	71.57
4.95-	5.05	7	59	6.86	57.84
4.85-	4.95	8	52	7.84	50.98
4.75-	4.85	12	44	11.76	43.14
4.65-	4.75	14	32	13.73	31.37
4.55-	4.65	7	18	6.86	17.65
4.45-	4.55	5	11	4.90	10.78
4.35-	4.45	4	6	3.92	5.88
4.25-	4.35	1	2	.98	1.96
4.15-	4.25	1	1	.98	.98

30H NOSE BREADTH					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
4.75-	4.85	2	102	1.96	100.00
4.65-	4.75	2	100	1.96	98.04
4.55-	4.65	4	98	0.00	96.08
4.45-	4.55	4	98	3.92	96.08
4.35-	4.45	4	94	3.92	92.16
4.25-	4.35	6	90	5.88	88.24
4.15-	4.25	3	84	2.94	82.35
4.05-	4.15	9	81	8.82	79.41
3.95-	4.05	4	72	3.92	70.59
3.85-	3.95	3	68	2.94	66.67
3.75-	3.85	7	65	6.86	63.73
3.65-	3.75	7	58	6.86	56.86
3.55-	3.65	6	51	5.88	50.00
3.45-	3.55	10	45	9.80	44.12
3.35-	3.45	7	35	6.86	34.31
3.25-	3.35	12	28	11.76	27.45
3.15-	3.25	5	16	4.90	15.69
3.05-	3.15	7	11	6.86	10.78
2.95-	3.05	2	4	1.96	3.92
2.85-	2.95	1	2	.98	1.96
2.75-	2.85	1	1	.98	.98

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

31H MOUTH BRTH/SMILING					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
8.05-	8.15	1	102	.98	100.00
7.95-	8.05	2	101	1.96	99.02
7.85-	7.95	1	99	.98	97.06
7.75-	7.85	1	98	.98	96.08
7.65-	7.75	2	97	1.96	95.10
7.55-	7.65	2	95	1.96	93.14
7.45-	7.55	0	93	0.00	91.18
7.35-	7.45	3	93	2.94	91.18
7.25-	7.35	3	90	2.94	88.24
7.15-	7.25	5	87	4.90	85.29
7.05-	7.15	3	82	2.94	80.39
6.95-	7.05	5	79	4.90	77.45
6.85-	6.95	5	74	4.90	72.55
6.75-	6.85	3	69	2.94	67.65
6.65-	6.75	3	66	2.94	64.71
6.55-	6.65	5	63	4.90	61.76
6.45-	6.55	4	58	3.92	56.86
6.35-	6.45	8	54	7.84	52.94
6.25-	6.35	5	46	4.90	45.10
6.15-	6.25	4	41	3.92	40.20
6.05-	6.15	5	37	4.90	36.27
5.95-	6.05	4	32	3.92	31.37
5.85-	5.95	7	28	6.86	27.45
5.75-	5.85	2	21	1.96	20.59
5.65-	5.75	7	19	6.86	18.63
5.55-	5.65	2	12	1.96	11.76
5.45-	5.55	2	10	1.96	9.80
5.35-	5.45	2	8	1.96	7.84
5.25-	5.35	3	6	2.94	5.88
5.15-	5.25	2	3	1.96	2.94
5.05-	5.15	1	1	.98	.98

32H EAR LENGTH					
RANGES	FRQ	CUMF	FRQ%	CUMF%	
7.15-	7.25	2	102	1.96	100.00
7.05-	7.15	3	100	2.94	98.04
6.95-	7.05	1	97	.98	95.10
6.85-	6.95	2	96	1.96	94.12
6.75-	6.85	2	94	1.96	92.16
6.65-	6.75	4	92	3.92	90.20
6.55-	6.65	6	88	5.88	86.27
6.45-	6.55	7	82	6.86	80.39
6.35-	6.45	10	75	9.80	73.53
6.25-	6.35	11	65	10.78	63.73
6.15-	6.25	14	54	13.73	52.94
6.05-	6.15	12	40	11.76	39.22
5.95-	6.05	5	28	4.90	27.45
5.85-	5.95	4	23	3.92	22.55
5.75-	5.85	4	19	3.92	18.63
5.65-	5.75	5	15	4.90	14.71
5.55-	5.65	3	10	2.94	9.80
5.45-	5.55	2	7	1.96	6.86
5.35-	5.45	2	5	1.96	4.90
5.25-	5.35	0	3	0.00	2.94
5.15-	5.25	0	3	0.00	2.94
5.05-	5.15	2	3	1.96	2.94
4.95-	5.05	0	1	0.00	.98
4.85-	4.95	1	1	.98	.98

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

33H EAR BREADTH					
RANGES	FRQ	CUMF	FRQX	CUMFX	
5.25- 5.35	1	102	.98	100.00	
5.15- 5.25	1	101	.98	99.02	
5.05- 5.15	5	100	4.90	98.04	
4.95- 5.05	0	95	0.00	93.14	
4.85- 4.95	1	95	.98	93.14	
4.75- 4.85	6	94	5.88	92.16	
4.65- 4.75	3	88	2.94	86.27	
4.55- 4.65	5	85	4.90	83.33	
4.45- 4.55	10	80	9.80	78.43	
4.35- 4.45	13	70	12.75	68.63	
4.25- 4.35	18	57	17.65	55.88	
4.15- 4.25	12	39	11.76	38.24	
4.05- 4.15	11	27	10.78	26.47	
3.95- 4.05	4	16	3.92	15.69	
3.85- 3.95	3	12	2.94	11.76	
3.75- 3.85	2	9	1.96	8.82	
3.65- 3.75	4	7	3.92	6.86	
3.55- 3.65	1	3	.98	2.94	
3.45- 3.55	1	2	.98	1.96	
3.35- 3.45	1	1	.98	.98	

34H BIAURICULAR BR					
RANGES	FRQ	CUMF	FRQX	CUMFX	
20.05- 20.15	1	102	.98	100.00	
19.95- 20.05	1	101	.98	99.02	
19.85- 19.95	1	100	.98	98.04	
19.75- 19.85	0	99	0.00	97.06	
19.65- 19.75	1	99	.98	97.06	
19.55- 19.65	1	98	.98	96.08	
19.45- 19.55	0	97	0.00	95.10	
19.35- 19.45	0	97	0.00	95.10	
19.25- 19.35	0	97	0.00	95.10	
19.15- 19.25	1	97	.98	95.10	
19.05- 19.15	1	96	.98	94.12	
18.95- 19.05	6	95	5.88	93.14	
18.85- 18.95	0	89	0.00	87.25	
18.75- 18.85	2	69	1.96	87.25	
18.65- 18.75	4	87	3.92	85.29	
18.55- 18.65	2	83	1.96	81.37	
18.45- 18.55	6	81	5.88	79.41	
18.35- 18.45	3	75	2.94	73.53	
18.25- 18.35	3	72	2.94	70.59	
18.15- 18.25	6	69	5.88	67.65	
18.05- 18.15	2	63	1.96	61.76	
17.95- 18.05	4	61	3.92	59.80	
17.85- 17.95	2	57	1.96	55.88	
17.75- 17.85	7	55	6.86	53.92	
17.65- 17.75	6	48	5.88	47.06	
17.55- 17.65	3	42	2.94	41.18	
17.45- 17.55	8	39	7.84	38.24	
17.35- 17.45	4	31	3.92	30.39	
17.25- 17.35	3	27	2.94	26.47	
17.15- 17.25	4	24	3.92	23.53	
17.05- 17.15	3	20	2.94	19.61	
16.95- 17.05	4	17	3.92	16.67	
16.85- 16.95	1	13	.98	12.75	
16.75- 16.85	2	12	1.96	11.76	
16.65- 16.75	2	10	1.96	9.80	
16.55- 16.65	2	8	1.96	7.84	
16.45- 16.55	2	6	1.96	5.88	
16.35- 16.45	0	4	0.00	3.92	
16.25- 16.35	1	4	.98	3.92	
16.15- 16.25	1	3	.98	2.94	
16.05- 16.15	0	2	0.00	1.96	
15.95- 16.05	1	2	.98	1.96	
15.85- 15.95	0	1	0.00	.98	
15.75- 15.85	0	1	0.00	.98	
15.65- 15.75	1	1	.98	.98	

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

54C HEAD CIRCUMFERENCE

RANGES	FRQ	CUMF	FRQ%	CUMF%
59.95- 59.15	1	102	.98	100.00
59.75- 59.95	0	101	0.00	99.02
59.55- 59.75	0	101	0.00	99.02
59.35- 59.55	1	101	.98	99.02
59.15- 59.35	0	100	0.00	98.04
58.95- 59.15	0	100	0.00	98.04
58.75- 58.95	2	100	1.96	98.04
58.55- 58.75	0	98	0.00	96.08
58.35- 58.55	2	98	1.96	96.08
58.15- 58.35	3	96	2.94	94.12
57.95- 58.15	1	93	.98	91.18
57.75- 57.95	2	92	1.96	90.20
57.55- 57.75	4	90	3.92	88.24
57.35- 57.55	3	86	2.94	84.31
57.15- 57.35	2	83	1.96	81.37
56.95- 57.15	2	81	1.96	79.41
56.75- 56.95	3	79	2.94	77.45
56.55- 56.75	5	76	4.90	74.51
56.35- 56.55	6	71	5.88	69.61
56.15- 56.35	4	65	3.92	63.73
55.95- 56.15	7	61	6.86	59.80
55.75- 55.95	3	54	2.94	52.94
55.55- 55.75	6	51	5.88	50.00
55.35- 55.55	8	45	7.84	44.12
55.15- 55.35	6	37	5.88	36.27
54.95- 55.15	3	31	2.94	30.39
54.75- 54.95	4	28	3.92	27.45
54.55- 54.75	5	24	4.90	23.53
54.35- 54.55	3	19	2.94	18.63
54.15- 54.35	5	16	4.90	15.69
53.95- 54.15	3	11	2.94	10.78
53.75- 53.95	0	8	0.00	7.84
53.55- 53.75	0	8	0.00	7.84
53.35- 53.55	0	8	0.00	7.84
53.15- 53.35	3	8	2.94	7.84
52.95- 53.15	2	5	1.96	4.90
52.75- 52.95	0	3	0.00	2.94
52.55- 52.75	1	3	.98	2.94
52.35- 52.55	1	2	.98	1.96
52.15- 52.35	1	1	.98	.98

55C HEAD BREADTH

RANGES	FRQ	CUMF	FRQ%	CUMF%
15.85- 15.95	1	102	.98	100.00
15.75- 15.85	1	101	.98	99.02
15.65- 15.75	6	100	5.88	98.04
15.55- 15.65	7	94	6.86	92.16
15.45- 15.55	6	87	5.88	89.29
15.35- 15.45	4	81	3.92	79.41
15.25- 15.35	6	77	5.88	77.49
15.15- 15.25	9	71	8.82	69.61
15.05- 15.15	9	62	8.82	60.78
14.95- 15.05	7	53	6.86	51.90
14.85- 14.95	6	46	5.88	45.10
14.75- 14.85	6	40	5.88	39.22
14.65- 14.75	8	34	7.84	33.33
14.55- 14.65	5	26	4.90	25.49
14.45- 14.55	4	21	3.92	20.59
14.35- 14.45	4	17	3.92	16.67
14.25- 14.35	2	15	1.96	12.75
14.15- 14.25	3	11	2.94	10.78
14.05- 14.15	6	8	5.88	7.84
13.95- 14.05	1	2	.98	1.96
13.85- 13.95	1	1	.98	.98

FREQUENCY TABLES FOR HEAD AND FACE MEASUREMENTS

56C HEAD LENGTH					
RANGES		FRQ	CUMF	FRQX	CUMFX
21.25- 21.35		1	132	.98	100.00
21.15- 21.25		0	101	0.00	99.02
21.05- 21.15		0	101	0.00	99.02
20.95- 21.05		1	101	.98	99.02
20.85- 20.95		1	100	.98	98.04
20.75- 20.85		2	99	1.96	97.06
20.65- 20.75		1	97	.98	95.10
20.55- 20.65		2	96	1.96	94.12
20.45- 20.55		0	94	0.00	92.16
20.35- 20.45		4	94	3.92	92.16
20.25- 20.35		3	90	2.94	88.24
20.15- 20.25		1	87	.98	85.29
20.05- 20.15		3	86	2.94	84.31
19.95- 20.05		2	83	1.96	81.37
19.85- 19.95		3	81	2.94	79.41
19.75- 19.85		3	78	2.94	76.47
19.65- 19.75		4	75	3.92	73.53
19.55- 19.65		8	71	7.84	69.61
19.45- 19.55		7	63	6.86	61.76
19.35- 19.45		9	56	8.82	54.90
19.25- 19.35		11	47	10.78	46.08
19.15- 19.25		11	36	10.78	35.29
19.05- 19.15		7	25	6.86	24.51
18.95- 19.05		5	18	4.90	17.65
18.85- 18.95		1	13	.98	12.75
18.75- 18.85		3	12	2.94	11.76
18.65- 18.75		1	9	.98	8.82
18.55- 18.65		1	8	.98	7.84
18.45- 18.55		0	7	0.00	6.86
18.35- 18.45		1	7	.98	6.86
18.25- 18.35		2	6	1.96	5.88
18.15- 18.25		0	4	0.00	3.92
18.05- 18.15		3	4	2.94	3.92
17.95- 18.05		0	1	0.00	.98
17.85- 17.95		0	1	0.00	.98
17.75- 17.85		0	1	0.00	.98
17.65- 17.75		0	1	0.00	.98
17.55- 17.65		1	1	.98	.98

B-4. FREQUENCY TABLES FOR THE STATIC STRENGTH SUBSERIES
(IN POUNDS)

1S STRNGTH/2H 38CM M1				
RANGES	FRQ	CUMF	FRQ%	CUMF%
344.75-349.75	1	102	.98	100.00
339.75-344.75	0	101	0.00	99.02
334.75-339.75	0	101	0.00	99.02
329.75-334.75	0	101	0.00	99.02
324.75-329.75	1	101	.98	99.02
319.75-324.75	0	100	0.00	98.04
314.75-319.75	1	100	.98	98.04
309.75-314.75	0	99	0.00	97.06
304.75-309.75	2	99	1.96	97.06
299.75-304.75	2	97	1.96	95.10
294.75-299.75	1	95	.98	93.14
289.75-294.75	2	94	1.96	92.16
284.75-289.75	1	92	.98	90.20
279.75-284.75	1	91	.98	89.22
274.75-279.75	3	90	2.94	88.24
269.75-274.75	4	87	3.92	85.29
264.75-269.75	2	83	1.96	81.37
259.75-264.75	2	81	1.96	79.41
254.75-259.75	6	79	5.88	77.45
249.75-254.75	6	73	5.88	71.57
244.75-249.75	3	67	2.94	65.69
239.75-244.75	2	64	1.96	62.75
234.75-239.75	5	62	4.90	60.78
229.75-234.75	4	57	3.92	55.88
224.75-229.75	2	53	1.96	51.96
219.75-224.75	3	51	2.94	50.00
214.75-219.75	5	48	4.90	47.06
209.75-214.75	5	43	4.90	42.16
204.75-209.75	2	38	1.96	37.25
199.75-204.75	3	36	2.94	35.29
194.75-199.75	5	33	4.90	32.35
189.75-194.75	4	28	3.92	27.45
184.75-189.75	1	24	.98	23.53
179.75-184.75	6	23	5.88	22.55
174.75-179.75	2	17	1.96	16.67
169.75-174.75	3	15	2.94	14.71
164.75-169.75	0	12	0.00	11.76
159.75-164.75	4	12	3.92	11.76
154.75-159.75	3	8	2.94	7.84
149.75-154.75	2	5	1.96	4.90
144.75-149.75	2	3	1.96	2.94
139.75-144.75	1	1	.98	.98

2S STRNGTH/2H 38CM M2				
RANGES	FRQ	CUMF	FRQ%	CUMF%
339.75-344.75	1	102	.98	100.00
334.75-339.75	0	101	0.00	99.02
329.75-334.75	0	101	0.00	99.02
324.75-329.75	0	101	0.00	99.02
319.75-324.75	3	101	2.94	99.02
314.75-319.75	0	98	0.00	96.08
309.75-314.75	1	98	.98	96.08
304.75-309.75	0	97	0.00	95.10
299.75-304.75	2	97	1.96	95.10
294.75-299.75	2	95	1.96	93.14
289.75-294.75	1	93	.98	91.18
284.75-289.75	0	92	0.00	90.20
279.75-284.75	1	92	.98	90.20
274.75-279.75	2	91	1.96	89.22
269.75-274.75	2	89	1.96	87.25
264.75-269.75	3	87	2.94	85.29
259.75-264.75	5	84	4.90	82.35
254.75-259.75	1	79	.98	77.45
249.75-254.75	6	78	7.84	76.47
244.75-249.75	2	70	1.96	68.03
239.75-244.75	9	68	8.82	66.67
234.75-239.75	2	59	1.96	57.84
229.75-234.75	3	57	2.94	55.88
224.75-229.75	4	54	3.92	52.94
219.75-224.75	4	50	3.92	49.02
214.75-219.75	6	46	5.88	45.10
209.75-214.75	5	40	4.90	39.22
204.75-209.75	5	35	4.90	34.31
199.75-204.75	4	30	3.92	29.41
194.75-199.75	3	26	2.94	25.49
189.75-194.75	5	23	4.90	22.55
184.75-189.75	3	18	2.94	17.65
179.75-184.75	0	15	0.00	14.71
174.75-179.75	6	15	5.88	14.71
169.75-174.75	0	9	0.00	8.82
164.75-169.75	1	9	.98	8.82
159.75-164.75	5	8	4.90	7.84
154.75-159.75	1	3	.98	2.94
149.75-154.75	1	2	.98	1.96
144.75-149.75	1	1	.98	.98

FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)

3S STRNGTH/2H 38CM P1				
RANGES	FRQ	CUMF	FRQ%	CUMF%
354.75-359.75	1	102	.98	100.00
349.75-354.75	0	101	0.00	99.02
344.75-349.75	1	101	.98	99.02
339.75-344.75	0	100	0.00	98.04
334.75-339.75	0	100	0.00	98.04
329.75-334.75	0	100	0.00	98.04
324.75-329.75	4	100	3.92	98.04
319.75-324.75	0	96	0.00	94.12
314.75-319.75	2	96	1.96	94.12
309.75-314.75	1	94	.98	92.16
304.75-309.75	5	93	4.90	91.18
299.75-304.75	0	88	0.00	86.27
294.75-299.75	4	88	3.92	86.27
289.75-294.75	1	84	.98	82.35
284.75-289.75	1	83	.98	81.37
279.75-284.75	5	82	4.90	80.39
274.75-279.75	2	77	1.96	75.49
269.75-274.75	3	75	2.94	73.53
264.75-269.75	4	72	3.92	70.59
259.75-264.75	5	68	4.90	66.67
254.75-259.75	6	63	5.88	61.76
249.75-254.75	2	57	1.96	55.88
244.75-249.75	5	55	4.90	53.92
239.75-244.75	1	50	.98	49.02
234.75-239.75	4	49	3.92	48.04
229.75-234.75	2	45	1.96	44.12
224.75-229.75	4	43	3.92	42.16
219.75-224.75	2	39	1.96	38.24
214.75-219.75	4	37	3.92	36.27
209.75-214.75	8	33	7.84	32.35
204.75-209.75	4	25	3.92	24.51
199.75-204.75	2	21	1.96	20.59
194.75-199.75	5	19	4.90	18.63
189.75-194.75	4	14	3.92	13.73
184.75-189.75	1	10	.98	9.80
179.75-184.75	2	9	1.96	8.82
174.75-179.75	2	7	1.96	6.86
169.75-174.75	1	5	.98	4.90
164.75-169.75	1	4	.98	3.92
159.75-164.75	1	3	.98	2.94
154.75-159.75	2	2	1.96	1.96

4S STRNGTH/2H 38CM P2				
RANGES	FRQ	CUMF	FRQ%	CUMF%
354.75-359.75	1	102	.98	100.00
349.75-354.75	0	101	0.00	99.02
344.75-349.75	1	101	.98	99.02
339.75-344.75	2	100	1.96	98.04
334.75-339.75	0	98	0.00	96.08
329.75-334.75	1	98	.98	96.08
324.75-329.75	1	97	.98	95.10
319.75-324.75	0	96	0.00	94.12
314.75-319.75	1	96	.98	94.12
309.75-314.75	2	95	1.96	93.14
304.75-309.75	0	93	0.00	91.18
299.75-304.75	3	93	2.94	91.18
294.75-299.75	1	90	.98	88.24
289.75-294.75	3	89	2.94	87.25
284.75-289.75	1	86	.98	84.31
279.75-284.75	2	85	1.96	83.33
274.75-279.75	4	83	3.92	81.37
269.75-274.75	4	79	3.92	77.45
264.75-269.75	9	75	6.82	73.53
259.75-264.75	4	66	3.92	64.71
254.75-259.75	11	62	10.78	60.78
249.75-254.75	3	51	2.94	50.00
244.75-249.75	5	48	4.90	47.06
239.75-244.75	1	43	.98	42.16
234.75-239.75	8	42	7.84	41.18
229.75-234.75	2	34	1.96	33.33
224.75-229.75	6	32	5.88	31.37
219.75-224.75	3	26	2.94	25.49
214.75-219.75	2	23	1.96	22.55
209.75-214.75	4	21	3.92	20.59
204.75-209.75	3	17	2.94	16.67
199.75-204.75	4	14	3.92	13.73
194.75-199.75	4	10	3.92	9.80
189.75-194.75	2	6	1.96	5.88
184.75-189.75	0	4	0.00	3.92
179.75-184.75	1	4	.98	3.92
174.75-179.75	1	3	.98	2.94
169.75-174.75	1	2	.98	1.96
164.75-169.75	1	1	.98	.98

FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)

5S STRNGTH/2H 50CM M1					6S STRNGTH/2H 50CM M2				
RANGES	FRQ	CUMF	FRQX	CUMFX	RANGES	FRQ	CUMF	FRQX	CUMFX
319.75-324.75	2	102	1.96	100.00	334.75-339.75	1	102	.98	100.00
314.75-319.75	1	100	.98	98.04	329.75-334.75	0	101	0.00	99.02
309.75-314.75	0	99	0.00	97.06	324.75-329.75	2	101	1.96	99.02
304.75-309.75	2	99	1.96	97.06	319.75-324.75	0	99	0.00	97.06
299.75-304.75	1	97	.98	95.10	314.75-319.75	1	99	.98	97.06
294.75-299.75	1	96	.98	94.12	309.75-314.75	0	98	0.00	96.08
289.75-294.75	1	95	.98	93.14	304.75-309.75	2	98	1.96	96.08
284.75-289.75	1	94	.98	92.16	299.75-304.75	1	96	.98	94.12
279.75-284.75	1	93	.98	91.18	294.75-299.75	0	95	0.00	93.14
274.75-279.75	1	92	.98	90.20	289.75-294.75	0	95	0.00	93.14
269.75-274.75	1	91	.98	89.22	284.75-289.75	2	95	1.96	93.14
264.75-269.75	4	90	3.92	88.24	279.75-284.75	0	93	0.00	91.18
259.75-264.75	2	86	1.96	84.31	274.75-279.75	3	93	2.94	91.18
254.75-259.75	3	84	2.94	82.35	269.75-274.75	3	90	2.94	88.24
249.75-254.75	2	81	1.96	79.41	264.75-269.75	2	87	1.96	85.29
244.75-249.75	5	79	4.90	77.45	259.75-264.75	1	85	.98	83.33
239.75-244.75	6	74	5.88	72.55	254.75-259.75	3	84	2.94	82.35
234.75-239.75	9	68	8.82	66.67	249.75-254.75	5	81	4.90	79.41
229.75-234.75	2	59	1.96	57.84	244.75-249.75	4	76	3.92	74.51
224.75-229.75	6	57	5.88	55.88	239.75-244.75	8	72	7.84	70.59
219.75-224.75	3	51	2.94	50.00	234.75-239.75	5	64	4.90	62.75
214.75-219.75	6	48	5.88	47.06	229.75-234.75	2	59	1.96	57.84
209.75-214.75	5	42	4.90	41.18	224.75-229.75	6	57	5.88	55.88
204.75-209.75	3	37	2.94	36.27	219.75-224.75	4	51	3.92	50.00
199.75-204.75	3	34	2.94	33.33	214.75-219.75	6	47	5.88	46.08
194.75-199.75	6	31	5.88	30.39	209.75-214.75	6	41	5.88	40.20
189.75-194.75	5	25	4.90	24.51	204.75-209.75	5	35	4.90	34.31
184.75-189.75	3	20	2.94	19.61	199.75-204.75	6	30	5.88	29.41
179.75-184.75	3	17	2.94	16.67	194.75-199.75	3	24	2.94	23.53
174.75-179.75	3	14	2.94	13.73	189.75-194.75	1	21	.98	20.59
169.75-174.75	3	11	2.94	10.78	184.75-189.75	5	20	4.90	19.61
164.75-169.75	1	8	.98	7.84	179.75-184.75	3	15	2.94	14.71
159.75-164.75	3	7	2.94	6.86	174.75-179.75	3	12	2.94	11.76
154.75-159.75	2	4	1.96	3.92	169.75-174.75	3	9	2.94	8.82
149.75-154.75	1	2	.98	1.96	164.75-169.75	3	6	2.94	5.88
144.75-149.75	1	1	.98	.98	159.75-164.75	2	3	1.96	2.94
					154.75-159.75	1	1	.98	.98

FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)

7S STRNGTH/2H 50CM P1				
RANGES	FRQ	CUMF	FRQ%	CUMF%
359.75-364.75	1	102	.98	100.00
354.75-359.75	0	101	0.00	99.02
349.75-354.75	0	101	0.00	99.02
344.75-349.75	0	101	0.00	99.02
339.75-344.75	4	101	3.92	99.02
334.75-339.75	0	97	0.00	95.10
329.75-334.75	0	97	0.00	95.10
324.75-329.75	2	97	1.96	95.10
319.75-324.75	1	95	.98	93.14
314.75-319.75	0	94	0.00	92.16
309.75-314.75	0	94	0.00	92.16
304.75-309.75	1	94	.98	92.16
299.75-304.75	4	93	3.92	91.18
294.75-299.75	2	89	1.96	87.25
289.75-294.75	2	87	1.96	85.29
284.75-289.75	2	85	1.96	83.33
279.75-284.75	0	83	0.00	81.37
274.75-279.75	4	83	3.92	81.37
269.75-274.75	2	79	1.96	77.45
264.75-269.75	6	77	5.88	75.49
259.75-264.75	5	71	4.90	69.61
254.75-259.75	6	66	5.88	64.71
249.75-254.75	6	60	5.88	58.82
244.75-249.75	5	54	4.90	52.94
239.75-244.75	3	49	2.94	48.04
234.75-239.75	5	46	4.90	45.10
229.75-234.75	5	41	4.90	40.20
224.75-229.75	4	36	3.92	35.29
219.75-224.75	1	32	.98	31.37
214.75-219.75	3	31	2.94	30.39
209.75-214.75	7	28	6.86	27.45
204.75-209.75	7	21	6.86	20.59
199.75-204.75	3	14	2.94	13.73
194.75-199.75	0	11	0.00	10.78
189.75-194.75	4	11	3.92	10.78
184.75-189.75	0	7	0.00	6.86
179.75-184.75	1	7	.98	6.86
174.75-179.75	2	6	1.96	5.88
169.75-174.75	2	4	1.96	3.92
164.75-169.75	1	2	.98	1.96
159.75-164.75	0	1	0.00	.98
154.75-159.75	1	1	.98	.98

8S STRNGTH/2H 50CM P2				
RANGES	FRQ	CUMF	FRQ%	CUMF%
364.75-369.75	1	102	.98	100.00
359.75-364.75	0	101	0.00	99.02
354.75-359.75	0	101	0.00	99.02
349.75-354.75	1	101	.98	99.02
344.75-349.75	0	100	0.00	98.04
339.75-344.75	0	100	0.00	98.04
334.75-339.75	1	100	.98	98.04
329.75-334.75	2	99	1.96	97.06
324.75-329.75	0	97	0.00	95.10
319.75-324.75	1	97	.98	95.10
314.75-319.75	2	96	1.96	94.12
309.75-314.75	2	94	1.96	92.16
304.75-309.75	0	92	0.00	90.20
299.75-304.75	2	92	1.96	90.20
294.75-299.75	4	90	3.92	88.24
289.75-294.75	2	86	1.96	84.31
284.75-289.75	0	84	0.00	82.35
279.75-284.75	5	84	4.90	82.35
274.75-279.75	1	79	.98	77.45
269.75-274.75	0	78	0.00	76.47
264.75-269.75	7	78	6.86	76.47
259.75-264.75	6	71	5.88	69.61
254.75-259.75	5	65	4.90	63.73
249.75-254.75	2	60	1.96	58.82
244.75-249.75	10	58	9.80	56.86
239.75-244.75	4	48	3.92	47.06
234.75-239.75	6	44	5.88	43.14
229.75-234.75	1	38	.98	37.25
224.75-229.75	3	37	2.94	36.27
219.75-224.75	6	34	5.88	33.33
214.75-219.75	10	28	9.80	27.45
209.75-214.75	1	18	.98	17.65
204.75-209.75	2	17	1.96	16.67
199.75-204.75	0	15	0.00	14.71
194.75-199.75	5	15	4.90	14.71
189.75-194.75	3	10	2.94	9.80
184.75-189.75	2	7	1.96	6.86
179.75-184.75	2	5	1.96	4.90
174.75-179.75	2	3	1.96	2.94
169.75-174.75	1	1	.98	.98

FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)

9S STRNGTH/2H 100CM M1				
RANGES	FRQ	CUMF	FRQ%	CUMF%
244.75-249.75	1	102	.98	100.00
239.75-244.75	0	101	0.00	99.02
234.75-239.75	0	101	0.00	99.02
229.75-234.75	0	101	0.00	99.02
224.75-229.75	0	101	0.00	99.02
219.75-224.75	0	101	0.00	99.02
214.75-219.75	0	101	0.00	99.02
209.75-214.75	4	101	3.92	99.02
204.75-209.75	1	97	.98	95.10
199.75-204.75	1	96	.98	94.12
194.75-199.75	4	95	3.92	93.14
189.75-194.75	2	91	1.96	89.22
184.75-189.75	1	89	.98	87.25
179.75-184.75	3	88	2.94	86.27
174.75-179.75	3	85	2.94	83.33
169.75-174.75	3	82	2.94	80.39
164.75-169.75	8	79	7.84	77.45
159.75-164.75	1	71	.98	69.61
154.75-159.75	5	70	4.90	68.63
149.75-154.75	6	65	5.88	63.73
144.75-149.75	3	59	2.94	57.84
139.75-144.75	3	56	2.94	54.90
134.75-139.75	8	53	7.84	51.96
129.75-134.75	13	45	12.75	44.12
124.75-129.75	9	32	8.82	31.37
119.75-124.75	4	23	3.92	22.55
114.75-119.75	4	19	3.92	18.63
109.75-114.75	3	15	2.94	14.71
104.75-109.75	2	12	1.96	11.76
99.75-104.75	5	10	4.90	9.80
94.75- 99.75	3	5	2.94	4.90
89.75- 94.75	0	2	0.00	1.96
84.75- 89.75	2	2	1.96	1.96

10S STRNGTH/2H 100CM M2				
RANGES	FRQ	CUMF	FRQ%	CUMF%
244.75-249.75	1	102	.98	100.00
239.75-244.75	0	101	0.00	99.02
234.75-239.75	1	101	.98	99.02
229.75-234.75	0	100	0.00	98.04
224.75-229.75	0	100	0.00	98.04
219.75-224.75	0	100	0.00	98.04
214.75-219.75	1	100	.98	98.04
209.75-214.75	1	99	.98	97.06
204.75-209.75	1	98	.98	96.08
199.75-204.75	2	97	1.96	95.10
194.75-199.75	3	95	2.94	93.14
189.75-194.75	1	92	.98	90.20
184.75-189.75	1	91	.98	89.22
179.75-184.75	1	90	.98	88.24
174.75-179.75	4	89	3.92	87.25
169.75-174.75	7	85	6.86	83.33
164.75-169.75	4	78	3.92	76.47
159.75-164.75	4	74	3.92	72.55
154.75-159.75	5	70	4.90	68.63
149.75-154.75	6	65	5.88	63.73
144.75-149.75	4	59	3.92	57.84
139.75-144.75	6	55	5.88	53.92
134.75-139.75	4	49	3.92	48.04
129.75-134.75	9	45	8.82	44.12
124.75-129.75	4	36	3.92	35.29
119.75-124.75	8	32	7.84	31.37
114.75-119.75	5	24	4.90	23.53
109.75-114.75	9	19	8.82	18.63
104.75-109.75	3	10	2.94	9.80
99.75-104.75	0	7	0.00	6.86
94.75- 99.75	3	7	2.94	6.86
89.75- 94.75	1	4	.98	3.92
84.75- 89.75	0	3	0.00	2.94
79.75- 84.75	3	3	2.94	2.94

FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)

115 STRNGTH/2H 100CM P1				
RANGES	FRQ	CUMF	FRQ%	CUMF%
254.75-259.75	1	102	.98	100.00
249.75-254.75	0	101	0.00	99.02
244.75-249.75	0	101	0.00	99.02
239.75-244.75	0	101	0.00	99.02
234.75-239.75	0	101	0.00	99.02
229.75-234.75	1	101	.98	99.02
224.75-229.75	0	100	0.00	98.04
219.75-224.75	4	100	3.92	98.04
214.75-219.75	1	96	.98	94.12
209.75-214.75	3	95	2.94	93.14
204.75-209.75	1	92	.98	90.20
199.75-204.75	2	91	1.96	89.22
194.75-199.75	3	89	2.94	87.25
189.75-194.75	4	86	3.92	84.31
184.75-189.75	5	82	4.90	80.39
179.75-184.75	4	77	3.92	75.49
174.75-179.75	2	73	1.96	71.57
169.75-174.75	6	71	5.88	69.61
164.75-169.75	6	65	5.88	63.73
159.75-164.75	3	59	2.94	57.84
154.75-159.75	2	56	1.96	54.90
149.75-154.75	5	54	4.90	52.94
144.75-149.75	8	49	7.84	48.04
139.75-144.75	9	41	8.82	40.20
134.75-139.75	6	32	5.88	31.37
129.75-134.75	6	26	5.88	25.49
124.75-129.75	7	20	6.86	19.61
119.75-124.75	4	13	3.92	12.75
114.75-119.75	3	9	2.94	8.82
109.75-114.75	3	6	2.94	5.88
104.75-109.75	1	3	.98	2.94
99.75-104.75	1	2	.98	1.96
94.75- 99.75	0	1	0.00	.98
89.75- 94.75	1	1	.98	.98

125 STRNGTH/2H 100CM P2				
RANGES	FRQ	CUMF	FRQ%	CUMF%
254.75-259.75	1	102	.98	100.00
249.75-254.75	1	101	.98	99.02
244.75-249.75	0	100	0.00	98.04
239.75-244.75	0	100	0.00	98.04
234.75-239.75	1	100	.98	98.04
229.75-234.75	0	99	0.00	97.06
224.75-229.75	1	99	.98	97.06
219.75-224.75	0	98	0.00	96.08
214.75-219.75	1	98	.98	96.08
209.75-214.75	6	97	5.88	95.10
204.75-209.75	2	91	1.96	89.22
199.75-204.75	3	89	2.94	87.25
194.75-199.75	1	86	.98	84.31
189.75-194.75	2	85	1.96	83.33
184.75-189.75	6	83	5.88	81.37
179.75-184.75	4	77	3.92	75.49
174.75-179.75	6	73	5.88	71.57
169.75-174.75	2	67	1.96	65.69
164.75-169.75	3	65	2.94	63.73
159.75-164.75	4	62	3.92	60.78
154.75-159.75	9	58	8.82	56.86
149.75-154.75	5	49	4.90	48.04
144.75-149.75	3	44	2.94	43.14
139.75-144.75	3	41	2.94	40.20
134.75-139.75	10	38	9.80	37.25
129.75-134.75	6	28	5.88	27.45
124.75-129.75	7	22	6.86	21.57
119.75-124.75	5	15	4.90	14.71
114.75-119.75	2	10	1.96	9.80
109.75-114.75	2	8	1.96	7.84
104.75-109.75	2	6	1.96	5.88
99.75-104.75	1	4	.98	3.92
94.75- 99.75	1	3	.98	2.94
89.75- 94.75	2	2	1.96	1.96

FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)

13S STRNGTH/2H 150CM M1				
RANGES	FRQ	CUMF	FRQX	CUMF%
259.75-264.75	1	102	.98	100.00
254.75-259.75	0	101	0.00	99.02
249.75-254.75	0	101	0.00	99.02
244.75-249.75	0	101	0.00	99.02
239.75-244.75	0	101	0.00	99.02
234.75-239.75	1	101	.98	99.02
229.75-234.75	2	100	1.96	98.04
224.75-229.75	0	98	0.00	96.08
219.75-224.75	3	98	2.94	96.08
214.75-219.75	1	95	.98	93.14
209.75-214.75	0	94	0.00	92.16
204.75-209.75	0	94	0.00	92.16
199.75-204.75	4	94	3.92	92.16
194.75-199.75	0	90	0.00	88.24
189.75-194.75	3	90	2.94	88.24
184.75-189.75	4	87	3.92	85.29
179.75-184.75	3	83	2.94	81.37
174.75-179.75	5	80	4.90	78.43
169.75-174.75	3	75	2.94	73.53
164.75-169.75	1	72	.98	70.59
159.75-164.75	3	71	2.94	69.61
154.75-159.75	4	68	3.92	66.67
149.75-154.75	7	64	6.86	62.75
144.75-149.75	5	57	4.90	55.88
139.75-144.75	6	52	5.88	50.98
134.75-139.75	5	46	4.90	45.10
129.75-134.75	4	41	3.92	40.20
124.75-129.75	3	37	2.94	36.27
119.75-124.75	8	34	7.84	33.33
114.75-119.75	3	26	2.94	25.49
109.75-114.75	5	23	4.90	22.55
104.75-109.75	5	18	4.90	17.65
99.75-104.75	5	13	4.90	12.75
94.75- 99.75	0	8	0.00	7.84
89.75- 94.75	3	8	2.94	7.84
84.75- 89.75	2	5	1.96	4.90
79.75- 84.75	3	3	2.94	2.94

14S STRNGTH/2H 150CM M2				
RANGES	FRQ	CUMF	FRQX	CUMF%
319.75-327.75	1	102	.98	100.00
311.75-319.75	0	101	0.00	99.02
303.75-311.75	0	101	0.00	99.02
295.75-303.75	0	101	0.00	99.02
287.75-295.75	0	101	0.00	99.02
279.75-287.75	0	101	0.00	99.02
271.75-279.75	0	101	0.00	99.02
263.75-271.75	0	101	0.00	99.02
255.75-263.75	1	101	.98	99.02
247.75-255.75	0	100	0.00	98.04
239.75-247.75	1	100	.98	98.04
231.75-239.75	2	99	1.96	97.06
223.75-231.75	1	97	.98	95.10
215.75-223.75	2	96	1.96	94.12
207.75-215.75	2	94	1.96	92.16
199.75-207.75	2	92	1.96	90.20
191.75-199.75	5	90	4.90	88.24
183.75-191.75	5	85	4.90	83.33
175.75-183.75	8	80	7.84	78.43
167.75-175.75	5	72	4.90	70.59
159.75-167.75	6	67	5.88	65.69
151.75-159.75	6	61	5.88	59.80
143.75-151.75	5	55	4.90	53.92
135.75-143.75	8	50	7.84	49.02
127.75-135.75	7	42	6.86	41.18
119.75-127.75	7	35	6.86	34.31
111.75-119.75	8	28	7.84	27.45
103.75-111.75	8	20	7.84	19.61
95.75-103.75	4	12	3.92	11.76
87.75- 95.75	5	8	4.90	7.84
79.75- 87.75	1	3	.98	2.94
71.75- 79.75	2	2	1.96	1.96

**FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)**

155 STRNGTH/2H		150CM P1	
RANGES	FRQ CUMF	FRQX	CUMFX
314.75-319.75	1 102	.98	100.00
309.75-314.75	0 101	0.00	99.02
304.75-309.75	0 101	0.00	99.02
299.75-304.75	0 101	0.00	99.02
294.75-299.75	0 101	0.00	99.02
289.75-294.75	0 101	0.00	99.02
284.75-289.75	0 101	0.00	99.02
279.75-284.75	0 101	0.00	99.02
274.75-279.75	0 101	0.00	99.02
269.75-274.75	0 101	0.00	99.02
264.75-269.75	0 101	0.00	99.02
259.75-264.75	1 101	.98	99.02
254.75-259.75	3 100	2.94	98.04
249.75-254.75	0 97	0.00	95.10
244.75-249.75	0 97	0.00	95.10
239.75-244.75	0 97	0.00	95.10
234.75-239.75	0 97	0.00	95.10
229.75-234.75	1 97	.98	95.10
224.75-229.75	1 96	.98	94.12
219.75-224.75	3 95	2.94	93.14
214.75-219.75	2 92	1.36	90.20
209.75-214.75	2 90	1.96	88.24
204.75-209.75	2 88	1.96	86.27
199.75-204.75	3 86	2.94	84.31
194.75-199.75	3 83	2.94	81.37
189.75-194.75	5 80	4.90	78.43
184.75-189.75	4 75	3.92	73.53
179.75-184.75	6 71	5.88	69.61
174.75-179.75	1 65	.98	63.73
169.75-174.75	1 64	.98	62.75
164.75-169.75	5 63	4.90	61.76
159.75-164.75	3 58	2.94	56.86
154.75-159.75	8 55	7.84	53.92
149.75-154.75	7 47	6.86	46.08
144.75-149.75	5 40	4.90	39.22
139.75-144.75	6 35	5.88	34.31
134.75-139.75	0 29	0.00	28.43
129.75-134.75	5 29	4.90	28.43
124.75-129.75	6 24	5.88	23.53
119.75-124.75	3 18	2.94	17.65
114.75-119.75	6 15	5.88	14.71
109.75-114.75	1 9	.98	8.82
104.75-109.75	4 8	3.92	7.84
99.75-104.75	1 4	.98	3.92
94.75-99.75	1 3	.98	2.94
89.75-94.75	2 2	1.96	1.96

16S STRNGTH/2H		150CM P2	
RANGES	FRQ CUMF	FRQX	CUMFX
359.75-367.75	1 102	.98	100.00
351.75-359.75	0 101	0.00	99.02
343.75-351.75	0 101	0.00	99.02
335.75-343.75	0 101	0.00	99.02
327.75-335.75	0 101	0.00	99.02
319.75-327.75	0 101	0.00	99.02
311.75-319.75	0 101	0.00	99.02
303.75-311.75	0 101	0.00	99.02
295.75-303.75	0 101	0.00	99.02
287.75-295.75	0 101	0.00	99.02
279.75-287.75	0 101	0.00	99.02
271.75-279.75	1 101	.98	99.02
263.75-271.75	1 100	.98	98.04
255.75-263.75	1 99	.98	97.06
247.75-255.75	1 98	.98	96.08
239.75-247.75	1 97	.98	95.10
231.75-239.75	3 96	2.94	94.12
223.75-231.75	1 93	.98	91.18
215.75-223.75	2 92	1.96	90.20
207.75-215.75	4 90	3.92	88.24
199.75-207.75	6 86	5.88	84.31
191.75-199.75	5 80	4.90	78.43
183.75-191.75	3 75	2.94	73.53
175.75-183.75	9 72	8.82	70.59
167.75-175.75	7 63	6.86	61.76
159.75-167.75	6 56	5.88	54.90
151.75-159.75	7 50	6.86	49.02
143.75-151.75	12 43	11.76	42.16
135.75-143.75	6 31	5.88	30.39
127.75-135.75	4 25	3.92	24.51
119.75-127.75	8 21	7.84	20.59
111.75-119.75	5 13	4.90	12.75
103.75-111.75	4 8	3.92	7.84
95.75-103.75	2 4	1.96	3.92
87.75-95.75	2 2	1.96	1.96

FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)

17S STRNGTH/1H 100CM M1				
RANGES	FRQ	CUMF	FRQ%	CUMF%
173.75-176.75	1	102	.98	100.00
170.75-173.75	1	101	.98	99.02
167.75-170.75	0	100	0.00	98.04
164.75-167.75	1	100	.98	98.04
161.75-164.75	1	99	.98	97.06
158.75-161.75	1	98	.98	96.08
155.75-158.75	0	97	0.00	95.10
152.75-155.75	0	97	0.00	95.10
149.75-152.75	0	97	0.00	95.10
146.75-149.75	0	97	0.00	95.10
143.75-146.75	0	97	0.00	95.10
140.75-143.75	0	97	0.00	95.10
137.75-140.75	3	97	2.94	95.10
134.75-137.75	0	94	0.00	92.16
131.75-134.75	1	94	.98	92.16
128.75-131.75	3	93	2.94	91.18
125.75-128.75	0	90	0.00	88.24
122.75-125.75	0	90	0.00	88.24
119.75-122.75	0	90	0.00	88.24
116.75-119.75	1	90	.98	88.24
113.75-116.75	3	89	2.94	87.25
110.75-113.75	6	86	5.88	84.31
107.75-110.75	3	80	2.94	78.43
104.75-107.75	6	77	5.88	75.49
101.75-104.75	2	71	1.96	69.61
98.75-101.75	4	69	3.92	67.65
95.75-98.75	6	65	5.88	63.73
92.75-95.75	6	59	5.88	57.84
89.75-92.75	3	53	2.94	51.96
86.75-89.75	7	50	6.86	49.02
83.75-86.75	3	43	2.94	42.16
80.75-83.75	6	40	5.88	39.22
77.75-80.75	2	34	1.96	33.33
74.75-77.75	0	32	0.00	31.37
71.75-74.75	3	32	2.94	31.37
68.75-71.75	6	29	5.88	28.43
65.75-68.75	5	23	4.90	22.55
62.75-65.75	1	18	.98	17.65
59.75-62.75	2	17	1.96	16.67
56.75-59.75	4	15	3.92	14.71
53.75-56.75	0	11	0.00	10.78
50.75-53.75	4	11	3.92	10.78
47.75-50.75	2	7	1.96	6.86
44.75-47.75	3	5	2.94	4.90
41.75-44.75	2	2	1.96	1.96

18S STRNGTH/1H 100CM M2				
RANGES	FRQ	CUMF	FRQ%	CUMF%
173.75-176.75	1	102	.98	100.00
170.75-173.75	0	101	0.00	99.02
167.75-170.75	0	101	0.00	99.02
164.75-167.75	0	101	0.00	99.02
161.75-164.75	1	101	.98	99.02
158.75-161.75	0	100	0.00	98.04
155.75-158.75	0	100	0.00	98.04
152.75-155.75	1	100	.98	98.04
149.75-152.75	2	99	1.96	97.06
146.75-149.75	0	97	0.00	95.10
143.75-146.75	1	97	.98	95.10
140.75-143.75	1	96	.98	94.12
137.75-140.75	0	95	0.00	93.14
134.75-137.75	0	95	0.00	93.14
131.75-134.75	1	95	.98	93.14
128.75-131.75	0	94	0.00	92.16
125.75-128.75	2	94	1.96	92.16
122.75-125.75	2	92	1.96	90.20
119.75-122.75	2	90	1.96	88.24
116.75-119.75	3	88	2.94	86.27
113.75-116.75	5	85	4.90	83.33
110.75-113.75	5	80	4.90	78.43
107.75-110.75	4	75	3.92	73.53
104.75-107.75	4	71	3.92	69.61
101.75-104.75	4	67	3.92	65.69
98.75-101.75	5	63	4.90	61.76
95.75-98.75	2	58	1.96	56.86
92.75-95.75	6	56	5.88	54.90
89.75-92.75	5	50	4.90	49.02
86.75-89.75	1	45	.98	44.12
83.75-86.75	5	44	4.90	43.14
80.75-83.75	4	39	3.92	38.24
77.75-80.75	1	35	.98	34.31
74.75-77.75	7	34	6.86	33.33
71.75-74.75	5	27	4.90	26.47
68.75-71.75	3	22	2.94	21.57
65.75-68.75	3	19	2.94	18.63
62.75-65.75	1	16	.98	15.69
59.75-62.75	1	15	.98	14.71
56.75-59.75	2	14	1.96	13.73
53.75-56.75	2	12	1.96	11.76
50.75-53.75	4	10	3.92	9.80
47.75-50.75	0	6	0.00	5.88
44.75-47.75	3	6	2.94	5.88
41.75-44.75	0	3	0.00	2.94
38.75-41.75	3	3	2.94	2.94

FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)

19S STRNGTH/1H 100CM P1				
RANGES	FRQ	CUMF	FRQ%	CUMF%
214.75-219.75	1	102	.98	100.00
209.75-214.75	0	101	0.00	99.02
204.75-209.75	0	101	0.00	99.02
199.75-204.75	0	101	0.00	99.02
194.75-199.75	0	101	0.00	99.02
189.75-194.75	0	101	0.00	99.02
184.75-189.75	1	101	.98	99.02
179.75-184.75	0	100	0.00	98.04
174.75-179.75	4	100	3.92	98.04
169.75-174.75	1	96	.98	94.12
164.75-169.75	1	95	.98	93.14
159.75-164.75	0	94	0.00	92.16
154.75-159.75	1	94	.98	92.16
149.75-154.75	0	93	0.00	91.18
144.75-149.75	2	93	1.96	91.18
139.75-144.75	0	91	0.00	89.22
134.75-139.75	1	91	.98	89.22
129.75-134.75	3	90	2.94	88.24
124.75-129.75	3	87	2.94	85.29
119.75-124.75	8	84	7.84	82.35
114.75-119.75	8	76	7.84	74.51
109.75-114.75	7	68	6.86	66.67
104.75-109.75	8	61	7.84	59.80
99.75-104.75	10	53	9.80	51.96
94.75- 99.75	5	43	4.90	42.16
89.75- 94.75	7	38	6.86	37.25
84.75- 89.75	4	31	3.92	30.39
79.75- 84.75	5	27	4.90	26.47
74.75- 79.75	5	22	4.90	21.57
69.75- 74.75	2	17	1.96	16.67
64.75- 69.75	2	15	1.96	14.71
59.75- 64.75	5	13	4.90	12.75
54.75- 59.75	4	8	3.92	7.84
49.75- 54.75	2	4	1.96	3.92
44.75- 49.75	1	2	.98	1.96
39.75- 44.75	1	1	.98	.98

20S STRNGTH/1H 100CM P2				
RANGES	FRQ	CUMF	FRQ%	CUMF%
214.75-219.75	1	102	.98	100.00
209.75-214.75	0	101	0.00	99.02
204.75-209.75	0	101	0.00	99.02
199.75-204.75	0	101	0.00	99.02
194.75-199.75	0	101	0.00	99.02
189.75-194.75	0	101	0.00	99.02
184.75-189.75	1	101	.98	99.02
179.75-184.75	0	100	0.00	98.04
174.75-179.75	2	100	1.96	98.04
169.75-174.75	1	98	.98	96.08
164.75-169.75	0	97	0.00	95.10
159.75-164.75	1	97	.98	95.10
154.75-159.75	0	96	0.00	94.12
149.75-154.75	3	96	2.94	94.12
144.75-149.75	2	93	1.96	91.18
139.75-144.75	1	91	.98	89.22
134.75-139.75	0	90	0.00	88.24
129.75-134.75	7	90	6.86	88.24
124.75-129.75	7	83	6.86	81.37
119.75-124.75	11	76	10.78	74.51
114.75-119.75	6	65	5.88	63.73
109.75-114.75	6	59	5.88	57.84
104.75-109.75	5	53	4.90	51.96
99.75-104.75	5	48	4.90	47.06
94.75- 99.75	8	43	7.84	42.16
89.75- 94.75	9	35	8.82	34.31
84.75- 89.75	5	26	4.90	25.49
79.75- 84.75	4	21	3.92	20.59
74.75- 79.75	3	17	2.94	16.67
69.75- 74.75	2	14	1.96	13.73
64.75- 69.75	1	12	.98	11.76
59.75- 64.75	1	11	.98	10.78
54.75- 59.75	6	10	5.88	9.80
49.75- 54.75	2	4	1.96	3.92
44.75- 49.75	2	2	1.96	1.96

FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)

21S STRNGTH/1H 45CM M1 C				
RANGES	FRQ	CUMF	FRQX	CUMFX
161.75-164.75	1	102	.98	100.00
158.75-161.75	1	101	.98	99.02
155.75-158.75	1	100	.98	98.04
152.75-155.75	1	99	.98	97.06
149.75-152.75	1	98	.98	96.08
146.75-149.75	0	97	0.00	95.10
143.75-146.75	1	97	.98	95.10
140.75-143.75	6	96	5.88	94.12
137.75-140.75	1	90	.98	88.24
134.75-137.75	2	89	1.96	87.25
131.75-134.75	4	87	3.92	85.29
128.75-131.75	2	83	1.96	81.37
125.75-128.75	1	81	.98	79.41
122.75-125.75	3	80	2.94	78.43
119.75-122.75	3	77	2.94	75.49
116.75-119.75	3	74	2.94	72.55
113.75-116.75	2	71	1.96	69.61
110.75-113.75	7	69	6.86	67.65
107.75-110.75	7	62	6.86	60.78
104.75-107.75	3	55	2.94	53.92
101.75-104.75	2	52	1.96	50.98
98.75-101.75	5	50	4.90	49.02
95.75- 98.75	0	45	0.00	44.12
92.75- 95.75	2	45	1.96	44.12
89.75- 92.75	5	43	4.90	42.16
86.75- 89.75	5	38	4.90	37.25
83.75- 86.75	4	33	3.92	32.35
80.75- 83.75	1	29	.98	28.43
77.75- 80.75	1	28	.98	27.45
74.75- 77.75	2	27	1.96	26.47
71.75- 74.75	2	25	1.96	24.51
68.75- 71.75	1	23	.98	22.55
65.75- 68.75	1	22	.98	21.57
62.75- 65.75	6	21	5.88	20.59
59.75- 62.75	4	15	3.92	14.71
56.75- 59.75	2	11	1.96	10.78
53.75- 56.75	2	9	1.96	8.82
50.75- 53.75	1	7	.98	6.86
47.75- 50.75	0	6	0.00	5.88
44.75- 47.75	3	6	2.94	5.88
41.75- 44.75	2	3	1.96	2.94
38.75- 41.75	0	1	0.00	.98
35.75- 38.75	0	1	0.00	.98
32.75- 35.75	1	1	.98	.98

22S STRNGTH/1H 45CM M2 C				
RANGES	FRQ	CUMF	FRQX	CUMFX
164.75-167.75	1	102	.98	100.00
161.75-164.75	0	101	0.00	99.02
158.75-161.75	0	101	0.00	99.02
155.75-158.75	1	101	.98	99.02
152.75-155.75	3	100	2.94	98.04
149.75-152.75	1	97	.98	95.10
146.75-149.75	2	96	1.96	94.12
143.75-146.75	2	94	1.96	92.16
140.75-143.75	5	92	4.90	90.20
137.75-140.75	2	87	1.96	85.29
134.75-137.75	4	85	3.92	83.33
131.75-134.75	5	81	4.90	79.41
128.75-131.75	1	76	.98	74.51
125.75-128.75	4	75	3.92	73.53
122.75-125.75	3	71	2.94	69.61
119.75-122.75	2	68	1.96	66.67
116.75-119.75	1	66	.98	64.71
113.75-116.75	7	65	6.86	63.73
110.75-113.75	0	58	0.00	56.86
107.75-110.75	4	58	3.92	56.86
104.75-107.75	7	54	6.86	52.94
101.75-104.75	7	47	6.86	46.08
98.75-101.75	2	40	1.96	39.22
95.75- 98.75	1	38	.98	37.25
92.75- 95.75	3	37	2.94	36.27
89.75- 92.75	2	34	1.96	33.33
86.75- 89.75	3	32	2.94	31.37
83.75- 86.75	2	29	1.96	28.43
80.75- 83.75	0	27	0.00	26.47
77.75- 80.75	2	27	1.96	26.47
74.75- 77.75	4	25	3.92	24.51
71.75- 74.75	1	21	.98	20.59
68.75- 71.75	2	20	1.96	19.61
65.75- 68.75	0	18	0.00	17.65
62.75- 65.75	4	18	3.92	17.65
59.75- 62.75	2	14	1.96	13.73
56.75- 59.75	3	12	2.94	11.76
53.75- 56.75	3	9	2.94	8.82
50.75- 53.75	1	6	.98	5.88
47.75- 50.75	3	5	2.94	4.90
44.75- 47.75	0	2	0.00	1.96
41.75- 44.75	1	2	.98	1.96
38.75- 41.75	1	1	.98	.98

**FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)**

23S STRNGTH/1H 45CM P1 C					24S STRNGTH/1H 45CM P2 C				
RANGES	FRQ	CUMF	FRQX	CUMFX	RANGES	FRQ	CUMF	FRQX	CUMFX
173.75-176.75	2	102	1.96	100.00	179.75-182.75	1	102	.98	100.00
170.75-173.75	0	100	0.00	98.04	176.75-179.75	2	101	1.96	99.02
167.75-170.75	1	100	.98	98.04	173.75-176.75	0	99	0.00	97.06
164.75-167.75	2	99	1.96	97.06	170.75-173.75	2	99	1.96	97.06
161.75-164.75	3	97	2.94	95.10	167.75-170.75	1	97	.98	95.10
158.75-161.75	2	94	1.96	92.16	164.75-167.75	3	96	2.94	94.12
155.75-158.75	4	92	3.92	90.20	161.75-164.75	0	93	0.00	91.18
152.75-155.75	0	88	0.00	86.27	158.75-161.75	2	93	1.96	91.18
149.75-152.75	3	88	2.94	86.27	155.75-158.75	2	91	1.96	89.22
146.75-149.75	1	85	.98	83.33	152.75-155.75	3	89	2.94	87.25
143.75-146.75	4	84	3.92	82.35	149.75-152.75	3	86	2.94	84.31
140.75-143.75	2	80	1.96	78.43	146.75-149.75	4	83	3.92	81.37
137.75-140.75	3	78	2.94	76.47	143.75-146.75	3	79	2.94	77.45
134.75-137.75	3	75	2.94	73.53	140.75-143.75	3	76	2.94	74.51
131.75-134.75	1	72	.98	70.59	137.75-140.75	3	73	2.94	71.57
128.75-131.75	4	71	3.92	69.61	134.75-137.75	1	70	.98	68.63
125.75-128.75	5	67	4.90	65.69	131.75-134.75	1	69	.98	67.65
122.75-125.75	4	62	3.92	60.78	128.75-131.75	5	68	4.90	66.67
119.75-122.75	5	58	4.90	56.86	125.75-128.75	3	63	2.94	61.76
116.75-119.75	5	53	4.90	51.96	122.75-125.75	5	60	4.90	58.82
113.75-116.75	5	48	4.90	47.06	119.75-122.75	4	55	3.92	53.92
110.75-113.75	4	43	3.92	42.16	116.75-119.75	3	51	2.94	50.00
107.75-110.75	2	39	1.96	38.24	113.75-116.75	3	48	2.94	47.06
104.75-107.75	1	37	.98	36.27	110.75-113.75	5	45	4.90	44.12
101.75-104.75	3	36	2.94	35.29	107.75-110.75	4	40	3.92	39.22
98.75-101.75	1	33	.98	32.35	104.75-107.75	2	36	1.96	35.29
95.75- 98.75	4	32	3.92	31.37	101.75-104.75	2	34	1.96	33.33
92.75- 95.75	2	28	1.96	27.45	98.75-101.75	1	32	.98	31.37
89.75- 92.75	1	26	.98	25.49	95.75- 98.75	1	31	.98	30.39
86.75- 89.75	0	25	0.00	24.51	92.75- 95.75	4	30	3.92	29.41
83.75- 86.75	1	25	.98	24.51	89.75- 92.75	2	26	1.96	25.49
80.75- 83.75	0	24	0.00	23.53	86.75- 89.75	1	24	.98	23.53
77.75- 80.75	4	24	3.92	23.53	83.75- 86.75	3	23	2.94	22.55
74.75- 77.75	2	20	1.96	19.61	80.75- 83.75	0	20	0.00	19.61
71.75- 74.75	3	18	2.94	17.65	77.75- 80.75	3	20	2.94	19.61
68.75- 71.75	2	15	1.96	14.71	74.75- 77.75	1	17	.98	16.67
65.75- 68.75	4	13	3.92	12.75	71.75- 74.75	3	16	2.94	15.69
62.75- 65.75	0	9	0.00	8.82	68.75- 71.75	3	13	2.94	12.75
59.75- 62.75	4	9	3.92	8.82	65.75- 68.75	3	10	2.94	9.80
56.75- 59.75	1	5	.98	4.90	62.75- 65.75	1	7	.98	6.86
53.75- 56.75	0	4	0.00	3.92	59.75- 62.75	2	6	1.96	5.88
50.75- 53.75	2	4	1.96	3.92	56.75- 59.75	2	4	1.96	3.92
47.75- 50.75	2	2	1.96	1.96	53.75- 56.75	1	2	.98	1.96
					50.75- 53.75	0	1	0.00	.98
					47.75- 50.75	1	1	.98	.98

**FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)**

25S STRNGTH/1H 45CM M1 S				
RANGES	FRQ	CUMF	FRQX	CUMFX
159.75-162.25	1	102	.98	100.00
157.25-159.75	0	101	0.00	99.02
154.75-157.25	0	101	0.00	99.02
152.25-154.75	0	101	0.00	99.02
149.75-152.25	1	101	.98	99.02
147.25-149.75	0	100	0.00	98.04
144.75-147.25	0	100	0.00	98.04
142.25-144.75	1	100	.98	98.04
139.75-142.25	0	99	0.00	97.06
137.25-139.75	0	99	0.00	97.06
134.75-137.25	1	99	.98	97.06
132.25-134.75	0	98	0.00	96.08
129.75-132.25	1	98	.96	96.08
127.25-129.75	0	97	0.00	95.10
124.75-127.25	4	97	3.92	95.10
122.25-124.75	1	93	.98	91.18
119.75-122.25	2	92	1.96	90.20
117.25-119.75	2	90	1.96	88.24
114.75-117.25	3	88	2.94	86.27
112.25-114.75	2	85	1.96	83.33
109.75-112.25	0	83	0.00	81.37
107.25-109.75	2	83	1.96	81.37
104.75-107.25	1	81	.98	79.41
102.25-104.75	6	80	5.88	78.43
99.75-102.25	3	74	2.94	72.55
97.25-99.75	3	71	2.94	69.61
94.75-97.25	2	68	1.96	66.67
92.25-94.75	9	66	8.82	64.71
89.75-92.25	3	57	2.94	55.88
87.25-89.75	4	54	3.92	52.94
84.75-87.25	6	50	5.88	49.02
82.25-84.75	4	44	3.92	43.14
79.75-82.25	1	40	.98	39.22
77.25-79.75	0	39	0.00	38.24
74.75-77.25	2	39	1.96	38.24
72.25-74.75	1	37	.98	36.27
69.75-72.25	3	36	2.94	35.29
67.25-69.75	3	33	2.94	32.35
64.75-67.25	4	30	3.92	29.41
62.25-64.75	4	26	3.92	25.49
59.75-62.25	4	22	3.92	21.57
57.25-59.75	1	18	.98	17.65
54.75-57.25	3	17	2.94	16.67
52.25-54.75	3	14	2.94	13.73
49.75-52.25	1	11	.98	10.78
47.25-49.75	4	10	3.92	9.80
44.75-47.25	1	6	.98	5.88
42.25-44.75	5	5	4.90	4.90

26S STRNGTH/1H 45CM M2 S				
RANGES	FRQ	CUMF	FRQX	CUMFX
167.75-170.75	1	102	.98	100.00
164.75-167.75	0	101	0.00	99.02
161.75-164.75	0	101	0.00	99.02
158.75-161.75	0	101	0.00	99.02
155.75-158.75	0	101	0.00	99.02
152.75-155.75	0	101	0.00	99.02
149.75-152.75	0	101	0.00	99.02
146.75-149.75	0	101	0.00	99.02
143.75-146.75	0	101	0.00	99.02
140.75-143.75	1	101	.98	99.02
137.75-140.75	1	100	.98	98.04
134.75-137.75	3	99	2.94	97.06
131.75-134.75	4	96	3.92	94.12
128.75-131.75	1	92	.98	90.20
125.75-128.75	2	91	1.96	89.22
122.75-125.75	1	89	.98	87.25
119.75-122.75	3	88	2.94	86.27
116.75-119.75	1	85	.98	83.33
113.75-116.75	4	84	3.92	82.35
110.75-113.75	2	80	1.96	78.43
107.75-110.75	7	78	6.86	76.47
104.75-107.75	3	71	2.94	69.61
101.75-104.75	4	68	3.92	66.67
98.75-101.75	5	64	4.90	62.75
95.75-98.75	2	59	1.96	57.84
92.75-95.75	3	57	2.94	55.88
89.75-92.75	9	54	8.82	52.94
86.75-89.75	3	45	2.94	44.12
83.75-86.75	2	42	1.96	41.18
80.75-83.75	2	40	1.96	39.22
77.75-80.75	4	38	3.92	37.25
74.75-77.75	6	34	5.88	33.33
71.75-74.75	5	28	4.90	27.45
68.75-71.75	4	23	3.92	22.55
65.75-68.75	4	19	3.92	18.63
62.75-65.75	4	15	3.92	14.71
59.75-62.75	3	11	2.94	10.78
56.75-59.75	0	8	0.00	7.84
53.75-56.75	3	8	2.94	7.84
50.75-53.75	3	5	2.94	4.90
47.75-50.75	1	2	.98	1.96
44.75-47.75	1	1	.98	.98

**FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)**

27S STRNGTH/1H 45CM P1 S					28S STRNGTH/1H 45CM P2 S				
RANGES		FRQ	CUMF	CUMFX	RANGES		FRQ	CUMF	CUMFX
182.75-185.75	1	102	.98	100.00	194.75-197.75	1	102	.98	100.00
179.75-182.75	0	101	0.00	99.02	191.75-194.75	0	101	0.00	99.02
176.75-179.75	0	101	0.00	99.02	188.75-191.75	0	101	0.00	99.02
173.75-176.75	0	101	0.00	99.02	185.75-188.75	0	101	0.00	99.02
170.75-173.75	0	101	0.00	99.02	182.75-185.75	0	101	0.00	99.02
167.75-170.75	0	101	0.00	99.02	179.75-182.75	0	101	0.00	99.02
164.75-167.75	0	101	0.00	99.02	176.75-179.75	0	101	0.00	99.02
161.75-164.75	2	101	1.96	99.02	173.75-176.75	0	101	0.00	99.02
158.75-161.75	0	99	0.00	97.06	170.75-173.75	0	101	0.00	99.02
155.75-158.75	0	99	0.00	97.06	167.75-170.75	0	101	0.00	99.02
152.75-155.75	0	99	0.00	97.06	164.75-167.75	0	101	0.00	99.02
149.75-152.75	1	99	.98	97.06	161.75-164.75	0	101	0.00	99.02
146.75-149.75	1	98	.98	96.08	158.75-161.75	0	101	0.00	99.02
143.75-146.75	2	97	1.96	95.10	155.75-158.75	2	101	1.96	99.02
140.75-143.75	1	95	.98	93.14	152.75-155.75	0	99	0.00	97.06
137.75-140.75	0	94	0.00	92.16	149.75-152.75	1	99	.98	97.06
134.75-137.75	5	94	4.90	92.16	146.75-149.75	2	98	1.96	96.08
131.75-134.75	2	89	1.96	87.25	143.75-146.75	1	96	.98	94.12
128.75-131.75	1	87	.98	85.29	140.75-143.75	5	95	4.90	93.14
125.75-128.75	4	86	3.92	84.31	137.75-140.75	3	90	2.94	88.24
122.75-125.75	3	82	2.94	80.39	134.75-137.75	1	87	.98	85.29
119.75-122.75	3	79	2.94	77.45	131.75-134.75	2	86	1.96	84.31
116.75-119.75	2	76	1.96	74.51	128.75-131.75	2	84	1.96	82.35
113.75-116.75	5	74	4.90	72.55	125.75-128.75	1	82	.98	80.39
110.75-113.75	3	69	2.94	67.65	122.75-125.75	5	81	4.90	79.41
107.75-110.75	5	66	4.90	64.71	119.75-122.75	6	76	5.88	74.51
104.75-107.75	2	61	1.96	59.80	116.75-119.75	3	70	2.94	68.63
101.75-104.75	7	59	6.86	57.84	113.75-116.75	4	67	3.92	65.69
98.75-101.75	6	52	5.88	50.98	110.75-113.75	6	63	5.88	61.76
95.75-98.75	3	46	2.94	45.10	107.75-110.75	5	57	4.90	55.88
92.75-95.75	1	43	.98	42.16	104.75-107.75	0	52	0.00	50.98
89.75-92.75	5	42	4.90	41.18	101.75-104.75	5	52	4.90	50.98
86.75-89.75	1	37	.98	36.27	98.75-101.75	2	47	1.96	46.08
83.75-86.75	3	36	2.94	35.29	95.75-98.75	6	45	5.88	44.12
80.75-83.75	3	33	2.94	32.35	92.75-95.75	7	39	6.86	38.24
77.75-80.75	1	30	.98	29.41	89.75-92.75	1	32	.98	31.37
74.75-77.75	4	29	3.92	28.43	86.75-89.75	2	31	1.96	30.39
71.75-74.75	6	25	5.88	24.51	83.75-86.75	4	29	3.92	28.43
68.75-71.75	3	19	2.94	18.63	80.75-83.75	3	25	2.94	24.51
65.75-68.75	0	16	0.00	15.69	77.75-80.75	3	22	2.94	21.57
62.75-65.75	4	16	3.92	15.69	74.75-77.75	7	19	6.86	18.63
59.75-62.75	1	12	.98	11.76	71.75-74.75	2	12	1.96	11.76
56.75-59.75	3	11	2.94	10.78	68.75-71.75	2	10	1.96	9.80
53.75-56.75	3	8	2.94	7.84	65.75-68.75	1	8	.98	7.84
50.75-53.75	4	5	3.92	4.90	62.75-65.75	0	7	0.00	6.86
47.75-50.75	1	1	.98	.98	59.75-62.75	4	7	3.92	6.86
					56.75-59.75	2	3	1.96	2.94
					53.75-56.75	0	1	0.00	.98
					50.75-53.75	1	1	.98	.98

FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)

29S STRNGTH/2H 38CM M1				
RANGES	FRQ	CUMF	FRQX	CUMFX
314.75-319.75	1	102	.98	100.00
309.75-314.75	0	101	0.00	99.02
304.75-309.75	0	101	0.00	99.02
299.75-304.75	1	101	.98	99.02
294.75-299.75	0	100	0.00	98.04
289.75-294.75	0	100	0.00	98.04
284.75-289.75	1	100	.98	98.04
279.75-284.75	0	99	0.00	97.06
274.75-279.75	1	99	.98	97.06
269.75-274.75	3	98	2.94	96.08
264.75-269.75	3	95	2.94	93.14
259.75-264.75	1	92	.98	90.20
254.75-259.75	2	91	1.96	89.22
249.75-254.75	1	89	.98	87.25
244.75-249.75	4	88	3.92	86.27
239.75-244.75	2	84	1.96	82.35
234.75-239.75	2	82	1.96	80.39
229.75-234.75	3	80	2.94	78.43
224.75-229.75	3	77	2.94	75.49
219.75-224.75	0	74	0.00	72.55
214.75-219.75	3	74	2.94	72.55
209.75-214.75	4	71	3.92	69.61
204.75-209.75	5	67	4.90	65.69
199.75-204.75	4	62	3.92	60.78
194.75-199.75	5	58	4.90	56.86
189.75-194.75	5	53	4.90	51.96
184.75-189.75	7	48	6.86	47.06
179.75-184.75	6	41	5.88	40.20
174.75-179.75	4	35	3.92	34.31
169.75-174.75	6	31	5.88	30.39
164.75-169.75	1	25	.98	24.51
159.75-164.75	3	24	2.94	23.53
154.75-159.75	3	21	2.94	20.59
149.75-154.75	2	18	1.96	17.65
144.75-149.75	3	16	2.94	15.69
139.75-144.75	3	13	2.94	12.75
134.75-139.75	5	10	4.90	9.80
129.75-134.75	1	5	.98	4.90
124.75-129.75	1	4	.98	3.92
119.75-124.75	0	3	0.00	2.94
114.75-119.75	0	3	0.00	2.94
109.75-114.75	2	3	1.96	2.94
104.75-109.75	0	1	0.00	.98
99.75-104.75	1	1	.98	.98

30S STRNGTH/2H 38CM M2				
RANGES	FRQ	CUMF	FRQX	CUMFX
319.75-324.75	1	102	.98	100.00
314.75-319.75	0	101	0.00	99.02
309.75-314.75	0	101	0.00	99.02
304.75-309.75	0	101	0.00	99.02
299.75-304.75	0	101	0.00	99.02
294.75-299.75	0	101	0.00	99.02
289.75-294.75	1	101	.98	99.02
284.75-289.75	0	100	0.00	98.04
279.75-284.75	0	100	0.00	98.04
274.75-279.75	1	100	.98	98.04
269.75-274.75	0	99	0.00	97.06
264.75-269.75	3	99	2.94	97.06
259.75-264.75	4	96	3.92	94.12
254.75-259.75	0	92	0.00	90.20
249.75-254.75	0	92	0.00	90.20
244.75-249.75	4	92	3.92	90.20
239.75-244.75	0	88	0.00	86.27
234.75-239.75	0	88	0.00	86.27
229.75-234.75	8	88	7.84	86.27
224.75-229.75	6	80	5.88	78.43
219.75-224.75	4	74	3.92	72.55
214.75-219.75	6	70	5.88	68.63
209.75-214.75	4	64	3.92	62.75
204.75-209.75	4	60	3.92	58.82
199.75-204.75	6	56	5.88	54.90
194.75-199.75	5	50	4.90	49.02
189.75-194.75	2	45	1.96	44.12
184.75-189.75	7	43	6.86	42.16
179.75-184.75	1	36	.98	35.29
174.75-179.75	7	35	6.86	34.31
169.75-174.75	3	28	2.94	27.45
164.75-169.75	3	25	2.94	24.51
159.75-164.75	2	22	1.96	21.57
154.75-159.75	5	20	4.90	19.61
149.75-154.75	5	15	4.90	14.71
144.75-149.75	2	10	1.96	9.80
139.75-144.75	2	8	1.96	7.84
134.75-139.75	2	6	1.96	5.88
129.75-134.75	1	4	.98	3.92
124.75-129.75	0	3	0.00	2.94
119.75-124.75	0	3	0.00	2.94
114.75-119.75	1	3	.98	2.94
109.75-114.75	0	2	0.00	1.96
104.75-109.75	2	2	1.96	1.96

FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)

31S STRNGTH/2H 38CM P1				
RANGES	FRQ	CUMF	FRQX	CUMFX
339.75-344.75	1	102	.98	100.00
334.75-339.75	1	101	.98	99.02
329.75-334.75	0	100	0.00	98.04
324.75-329.75	0	100	0.00	98.04
319.75-324.75	0	100	0.00	98.04
314.75-319.75	0	100	0.00	98.04
309.75-314.75	2	100	1.96	98.04
304.75-309.75	0	98	0.00	96.08
299.75-304.75	2	98	1.96	96.08
294.75-299.75	0	96	0.00	94.12
289.75-294.75	0	96	0.00	94.12
284.75-289.75	1	96	.98	94.12
279.75-284.75	2	95	1.96	93.14
274.75-279.75	3	93	2.94	91.18
269.75-274.75	2	90	1.96	88.24
264.75-269.75	0	88	0.00	86.27
259.75-264.75	2	88	1.96	86.27
254.75-259.75	4	86	3.92	84.31
249.75-254.75	3	82	2.94	80.39
244.75-249.75	3	79	2.94	77.45
239.75-244.75	3	76	2.94	74.51
234.75-239.75	2	73	1.96	71.57
229.75-234.75	3	71	2.94	69.61
224.75-229.75	6	68	5.88	66.67
219.75-224.75	0	62	0.00	60.78
214.75-219.75	0	62	7.84	60.78
209.75-214.75	4	54	3.92	52.94
204.75-209.75	4	50	3.92	49.02
199.75-204.75	3	46	2.94	45.10
194.75-199.75	11	43	10.78	42.16
189.75-194.75	5	32	4.90	31.37
184.75-189.75	5	27	4.90	26.47
179.75-184.75	3	22	2.94	21.57
174.75-179.75	2	19	1.96	18.63
169.75-174.75	2	17	1.96	16.67
164.75-169.75	5	15	4.90	14.71
159.75-164.75	3	10	2.94	9.80
154.75-159.75	0	7	0.00	6.86
149.75-154.75	1	7	.98	6.86
144.75-149.75	2	6	1.96	5.88
139.75-144.75	1	4	.98	3.92
134.75-139.75	0	3	0.00	2.94
129.75-134.75	1	3	.98	2.94
124.75-129.75	0	2	0.98	1.96
119.75-124.75	2	2	1.96	1.96

32S STRNGTH/2H 38CM P2				
RANGES	FRQ	CUMF	FRQX	CUMFX
334.75-339.75	1	102	.98	100.00
329.75-334.75	1	101	.98	99.02
324.75-329.75	0	100	0.00	98.04
319.75-324.75	0	100	0.00	98.04
314.75-319.75	0	100	0.00	98.04
309.75-314.75	0	100	0.00	98.04
304.75-309.75	0	100	0.00	98.04
299.75-304.75	1	100	.98	98.04
294.75-299.75	1	99	.98	97.06
289.75-294.75	2	98	1.96	96.08
284.75-289.75	0	96	0.00	94.12
279.75-284.75	3	96	2.94	94.12
274.75-279.75	2	93	1.96	91.18
269.75-274.75	2	91	1.96	89.22
264.75-269.75	2	89	1.96	87.25
259.75-264.75	0	87	0.00	85.29
254.75-259.75	3	87	2.94	85.29
249.75-254.75	4	84	3.92	82.35
244.75-249.75	5	80	4.90	78.43
239.75-244.75	3	75	2.94	73.53
234.75-239.75	5	72	4.90	70.59
229.75-234.75	6	67	5.88	65.69
224.75-229.75	6	61	5.88	59.80
219.75-224.75	2	55	1.96	53.92
214.75-219.75	6	53	5.88	51.96
209.75-214.75	3	47	2.94	46.08
204.75-209.75	5	44	4.90	43.14
199.75-204.75	6	39	5.88	38.24
194.75-199.75	2	33	1.96	32.35
189.75-194.75	0	31	7.84	30.39
184.75-189.75	7	23	0.86	22.55
179.75-184.75	2	16	1.96	15.69
174.75-179.75	1	14	.98	13.73
169.75-174.75	3	13	2.94	12.75
164.75-169.75	3	10	2.94	9.80
159.75-164.75	2	7	1.96	6.86
154.75-159.75	2	5	1.96	4.90
149.75-154.75	0	3	0.00	2.94
144.75-149.75	0	3	0.00	2.94
139.75-144.75	0	3	0.00	2.94
134.75-139.75	0	3	0.00	2.94
129.75-134.75	2	3	1.96	2.94
124.75-129.75	1	1	.98	.98

**FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)**

33S STRNGTH/2H 50CM M1				
RANGES	FRQ	CUMF	FRQ%	CUMF%
294.75-299.75	1	102	.98	100.00
289.75-294.75	0	101	0.00	99.02
284.75-289.75	0	101	0.00	99.02
279.75-284.75	0	101	0.00	99.02
274.75-279.75	1	101	.98	99.02
269.75-274.75	0	100	0.00	98.04
264.75-269.75	1	100	.98	98.04
259.75-264.75	1	99	.98	97.06
254.75-259.75	0	98	0.00	96.08
249.75-254.75	0	98	0.00	96.08
244.75-249.75	0	98	0.00	96.08
239.75-244.75	0	98	0.00	96.08
234.75-239.75	1	98	.98	96.08
229.75-234.75	2	97	1.96	95.10
224.75-229.75	0	95	0.00	93.14
219.75-224.75	1	95	.98	93.14
214.75-219.75	1	94	.98	92.16
209.75-214.75	1	93	.98	91.18
204.75-209.75	4	92	3.92	90.20
199.75-204.75	10	88	9.80	86.27
194.75-199.75	3	78	2.94	76.47
189.75-194.75	2	75	1.96	73.53
184.75-189.75	5	73	4.90	71.57
179.75-184.75	2	68	1.96	66.67
174.75-179.75	7	66	6.86	64.71
169.75-174.75	6	59	5.88	57.84
164.75-169.75	9	53	8.82	51.96
159.75-164.75	7	44	6.86	43.14
154.75-159.75	5	37	4.90	36.27
149.75-154.75	5	32	4.90	31.37
144.75-149.75	4	27	3.92	26.47
139.75-144.75	4	23	3.92	22.55
134.75-139.75	4	19	3.92	18.63
129.75-134.75	2	15	1.96	14.71
124.75-129.75	2	13	1.96	12.75
119.75-124.75	3	11	2.94	10.78
114.75-119.75	1	8	.98	7.84
109.75-114.75	1	7	.98	6.86
104.75-109.75	0	6	0.00	5.88
99.75-104.75	1	6	.98	5.88
94.75-99.75	4	5	3.92	4.90
89.75-94.75	0	1	0.00	.98
84.75-89.75	0	1	0.00	.98
79.75-84.75	1	1	.98	.98

34S STRNGTH/2H 50CM M2				
RANGES	FRQ	CUMF	FRQ%	CUMF%
254.75-259.75	2	102	1.96	100.00
249.75-254.75	2	100	1.96	98.04
244.75-249.75	1	98	.98	96.08
239.75-244.75	0	97	0.00	95.10
234.75-239.75	0	97	0.00	95.10
229.75-234.75	1	97	.98	95.10
224.75-229.75	3	96	2.94	94.12
219.75-224.75	3	93	2.94	91.18
214.75-219.75	0	90	0.00	88.24
209.75-214.75	2	90	1.96	88.24
204.75-209.75	5	88	4.90	86.27
199.75-204.75	2	83	1.96	81.37
194.75-199.75	4	81	3.92	79.41
189.75-194.75	4	77	3.92	75.49
184.75-189.75	6	73	5.88	71.57
179.75-184.75	2	67	1.96	65.69
174.75-179.75	4	65	3.92	63.73
169.75-174.75	6	61	5.88	59.80
164.75-169.75	8	55	7.84	53.92
159.75-164.75	8	47	7.84	46.08
154.75-159.75	5	39	4.90	38.24
149.75-154.75	9	34	8.82	33.33
144.75-149.75	2	25	1.96	24.51
139.75-144.75	4	23	3.92	22.55
134.75-139.75	4	19	3.92	18.63
129.75-134.75	4	15	3.92	14.71
124.75-129.75	3	11	2.94	10.78
119.75-124.75	2	8	1.96	7.84
114.75-119.75	0	6	0.00	5.88
109.75-114.75	3	6	2.94	5.88
104.75-109.75	1	3	.98	2.94
99.75-104.75	1	2	.98	1.96
94.75-99.75	0	1	0.00	.98
89.75-94.75	1	1	.98	.98

**FREQUENCY TABLES FOR MEN'S STATIC STRENGTH MEASUREMENTS
(IN POUNDS)**

35S STRNGTH/2H 50CM P1				
RANGES	FRQ	CUMF	FRQX	CUMFX
319.75-324.75	1	102	.98	100.00
314.75-319.75	0	101	0.00	99.02
309.75-314.75	1	101	.98	99.02
304.75-309.75	0	100	0.00	98.04
299.75-304.75	1	100	.98	98.04
294.75-299.75	0	99	0.00	97.06
289.75-294.75	0	99	0.00	97.06
284.75-289.75	1	99	.98	97.06
279.75-284.75	0	98	0.00	96.08
274.75-279.75	0	98	0.00	96.08
269.75-274.75	0	98	0.00	96.08
264.75-269.75	0	98	0.00	96.08
259.75-264.75	0	98	0.00	96.08
254.75-259.75	1	98	.98	96.08
249.75-254.75	1	97	.98	95.10
244.75-249.75	1	96	.98	94.12
239.75-244.75	1	95	.98	93.14
234.75-239.75	3	94	2.94	92.16
229.75-234.75	4	91	3.92	89.22
224.75-229.75	2	87	1.96	85.29
219.75-224.75	3	85	2.94	83.33
214.75-219.75	5	82	4.90	80.39
209.75-214.75	5	77	4.90	75.49
204.75-209.75	3	72	2.94	70.59
199.75-204.75	2	69	1.96	67.65
194.75-199.75	4	67	3.92	65.69
189.75-194.75	3	63	2.94	61.76
184.75-189.75	8	60	7.84	58.82
179.75-184.75	3	52	2.94	50.98
174.75-179.75	7	49	6.86	48.04
169.75-174.75	9	42	8.82	41.18
164.75-169.75	6	33	5.88	32.35
159.75-164.75	5	27	4.90	26.47
154.75-159.75	4	22	3.92	21.57
149.75-154.75	2	18	1.96	17.65
144.75-149.75	3	16	2.94	15.69
139.75-144.75	4	13	3.92	12.75
134.75-139.75	2	9	1.96	8.82
129.75-134.75	0	7	0.00	6.86
124.75-129.75	0	7	0.00	6.86
119.75-124.75	2	7	1.96	6.86
114.75-119.75	3	5	2.94	4.90
109.75-114.75	1	2	.98	1.96
104.75-109.75	0	1	0.00	.98
99.75-104.75	0	1	0.00	.98
94.75-99.75	0	1	0.00	.98
89.75-94.75	1	1	.98	.98

36S STRNGTH/2H 50CM P2				
RANGES	FRQ	CUMF	FRQX	CUMFX
294.75-299.75	1	102	.98	100.00
289.75-294.75	2	101	1.96	99.02
284.75-289.75	0	99	0.00	97.06
279.75-284.75	0	99	0.00	97.06
274.75-279.75	1	99	.98	97.06
269.75-274.75	3	98	2.94	96.08
264.75-269.75	0	95	0.00	93.14
259.75-264.75	0	95	0.00	93.14
254.75-259.75	0	95	0.00	93.14
249.75-254.75	3	95	2.94	93.14
244.75-249.75	2	92	1.96	90.20
239.75-244.75	2	90	1.96	88.24
234.75-239.75	1	88	.98	86.27
229.75-234.75	2	87	1.96	85.29
224.75-229.75	1	85	.98	83.33
219.75-224.75	3	84	2.94	82.35
214.75-219.75	6	81	5.88	79.41
209.75-214.75	3	75	2.94	73.53
204.75-209.75	5	72	4.90	70.59
199.75-204.75	5	67	4.90	65.69
194.75-199.75	3	62	2.94	60.78
189.75-194.75	2	59	1.96	57.84
184.75-189.75	8	57	7.84	55.88
179.75-184.75	6	49	5.88	48.04
174.75-179.75	7	43	6.86	42.16
169.75-174.75	5	36	4.90	35.29
164.75-169.75	7	31	6.86	30.39
159.75-164.75	2	24	1.96	23.53
154.75-159.75	6	22	5.88	21.57
149.75-154.75	2	16	1.96	15.69
144.75-149.75	3	14	2.94	13.73
139.75-144.75	2	11	1.96	10.78
134.75-139.75	3	9	2.94	8.82
129.75-134.75	1	6	.98	5.88
124.75-129.75	1	5	.98	4.90
119.75-124.75	3	4	2.94	3.92
114.75-119.75	1	1	.98	.98

Preceding Page BLANK - NOT FILMED

APPENDIX C

XVAL COMPUTER PRINTOUTS

The following pages contain computer printouts for the core series and each of the four subseries for the XVAL (=eXtreme VALue) program. These printouts represent the data after the editing had been completed.

These printouts provide, for each variable, the following values:

- a. the ten smallest values and the associated subject numbers;
- b. the ten largest values and the associated subject numbers;
- c. the mean value based on all the data;
- d. the standard deviation based on all the data;
- e. the coefficient of variation;
- f. β_1 , the measure of symmetry;
- g. β_2 , the measure of kurtosis;
- h. the mean value based on all the data except the 20 extreme values (those listed here): "(N-20)-AVG EST";
- i. the standard deviation estimated on the basis of all the data except the 20 extreme values (a truncated normal distribution is assumed): "(N-20)-S.D. EST";
- j. the difference between the two mean values (items c and h) expressed as a percent of the estimated standard deviation (item i);
- k. the difference between the two standard deviation values (items d and i) similarly expressed;
- l. the number of non-zero values.

The data values are in the units in which they were measured with a few exceptions. Most values are in millimeters. The static strength values are in tenths of pounds. The weights were measured to the quarter-pound and punched as tenths of pounds.

The XVAL printout for the static strength subseries covers the 36 measurements: two mean and two peak values at each of nine arrangements. Two additional measurements -- stature and weight -- are included for comparative purposes. Following are the means, standard deviations, 5th and 95th percentile values for these additional variables.

	<u>Mean</u>	<u>S.D.</u>	<u>5th %ile</u>	<u>95th %ile</u>
Stature	174.0 cm	7.0	162.6	185.7
Weight	157.8 lbs	26.4	122.9	203.5

C-1. XVAL TABLES FOR THE CORE-SUBSERIES 1 MEASUREMENTS

STATISTICS FOR VARIABLES 1C THROUGH 5T

	1C	2C	4C	2T	5C	3T	4T	5T
	WEIGHT	STATURE	AXILLA HEIGHT	SUPRASTERNAL NALE HEIGHT	CHEST HEIGHT	SUBSTERNAL LE HEIGHT	ELBOW HEIGHT	KNUCKLE HEIGHT
	VALUE SUBJECT	VALUE SUBJECT	VALUE SUBJECT	VALUE SUBJECT	VALUE SUBJECT	VALUE SUBJECT	VALUE SUBJECT	VALUE SUBJECT
1ST SMALLEST	1025.0 5008	1530.0 5042	1133.0 5008	1246.0 5008	1103.0 5008	1038.0 5008	945.0 5008	624.0 5008
2ND SMALLEST	1035.0 5042	1537.0 5048	1130.0 5159	1248.0 5042	1109.0 5159	1071.0 5159	953.0 5159	655.0 5101
3RD SMALLEST	1038.0 5008	1562.0 5159	1150.0 5042	1275.0 5159	1134.0 5042	1084.0 5101	965.0 5230	657.0 5070
4TH SMALLEST	1145.0 5226	1586.0 5068	1103.0 5230	1289.0 5101	1144.0 5180	1088.0 5159	965.0 5042	659.0 5042
5TH SMALLEST	1165.0 5035	1588.0 5180	1179.0 5370	1293.0 5230	1146.0 5101	1120.0 5230	979.0 5070	662.0 5180
6TH SMALLEST	1173.0 5184	1591.0 5230	1189.0 5101	1293.0 5068	1151.0 5170	1106.0 5180	980.0 5180	671.0 5159
7TH SMALLEST	1180.0 5199	1593.0 5011	1190.0 5180	1297.0 5011	1153.0 5230	1149.0 5070	993.0 5101	671.0 5089
8TH SMALLEST	1185.0 5286	1598.0 5101	1192.0 5011	1299.0 5180	1162.0 5068	1111.0 5068	998.0 5086	676.0 5077
9TH SMALLEST	1185.0 5176	1599.0 5120	1197.0 5086	1303.0 5274	1163.0 5070	1113.0 5011	998.0 5077	677.0 5221
XTH SMALLEST	1200.0 5238	1607.0 5274	1200.0 5077	1312.0 5286	1165.0 5011	1110.0 5286	999.0 5170	679.0 5068

XTH LARGEST	2098.0 5168	1874.0 5058	1418.0 5187	1540.0 5058	1372.0 5168	1325.0 5130	1186.0 5257	830.0 5244
9TH LARGEST	2103.0 5017	1874.0 5168	1423.0 5205	1544.0 5205	1372.0 5205	1326.0 5244	1189.0 5098	835.0 5029
8TH LARGEST	2110.0 5083	1875.0 5239	1427.0 5257	1553.0 5205	1377.0 5013	1328.0 5168	1193.0 5239	836.0 5187
7TH LARGEST	2130.0 5090	1876.0 5257	1428.0 5239	1554.0 5168	1381.0 5239	1329.0 5264	1195.0 5264	837.0 5232
6TH LARGEST	2155.0 5051	1891.0 5265	1429.0 5130	1565.0 5264	1385.0 5130	1334.0 5264	1198.0 5168	840.0 5217
5TH LARGEST	2155.0 5181	1898.0 5264	1433.0 5168	1567.0 5257	1386.0 5257	1335.0 5267	1209.0 5267	841.0 5056
4TH LARGEST	2163.0 5056	1907.0 5130	1452.0 5204	1567.0 5267	1400.0 5257	1342.0 5021	1214.0 5217	846.0 5168
3RD LARGEST	2170.0 5284	1912.0 5279	1456.0 5267	1570.0 5130	1400.0 5279	1357.0 5279	1216.0 5205	854.0 5239
2ND LARGEST	2203.0 5222	1930.0 5267	1456.0 5279	1594.0 5279	1427.0 5267	1359.0 5257	1220.0 5279	872.0 5265
1ST LARGEST	2338.0 5058	1974.0 5051	1497.0 5051	1627.0 5051	1480.0 5051	1402.0 5051	1264.0 5051	895.0 5051

THE MEAN VALUE	1500.16	1740.74	1312.44	1426.99	1274.26	1220.68	1094.02	755.07
STD. DEVIATION	242.16	68.19	58.89	60.85	56.71	54.94	50.54	41.15
COEFF/VARIATION	15.52	3.92	4.49	4.26	4.45	4.48	4.62	5.45
VETA ONE	.61	.00	-.08	-.01	-.04	-.15	-.03	.05
VETA TWO	2.94	3.54	3.25	3.37	3.22	3.38	3.28	3.26
(N-20)-AVG EST	1503.60	1740.79	1312.77	1427.01	1274.54	1226.19	1094.06	755.01
(N-20)-S.D. EST	245.90	65.51	57.98	59.17	56.13	53.90	49.64	40.62
PCT DIFF/MEANS	3.	-0.	-1.	-0.	-1.	-1.	-0.	0.
PCT DIF/ST DVS	-2.	4.	2.	3.	1.	2.	2.	1.
SIZE OF SAMPLE	287	287	287	287	287	287	287	287

STATISTICS FOR VARIABLES 6C THROUGH 12C

Best Available COPY

	6C	8C	7T	8T	9T	10T	11C	12C
	WAIST HT/ NATURAL	BUTTOCK H EIGHT	GLUTEAL F URROW HT	TIBIALE H EIGHT	ACROMION- RADIALE	RADIALE-S TYLION	SITTING H EIGHT	EYE HEIGH T/SIT
	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE
1ST SMALLEST	906.0 5159	755.0 5042	601.0 5042	404.0 5159	273.0 5159	210.0 5042	761.0 5120	668.0 5120
2ND SMALLEST	908.0 5086	771.0 5111	694.0 5159	404.0 5000	290.0 5015	220.0 5159	791.0 5000	675.0 5008
3RD SMALLEST	916.0 5008	774.0 5015	700.0 5011	404.0 5011	291.0 5042	229.0 5015	805.0 5091	685.0 5068
4TH SMALLEST	917.0 5042	775.0 5159	710.0 5170	415.0 5042	296.0 5180	235.0 5220	809.0 5008	698.0 5150
5TH SMALLEST	920.0 5170	779.0 5008	712.0 5221	420.0 5286	295.0 5070	235.0 5170	815.0 5153	699.0 5042
6TH SMALLEST	933.0 5041	780.0 5286	714.0 5183	420.0 5070	301.0 5221	237.0 5230	817.0 5042	702.0 5153
7TH SMALLEST	934.0 5099	791.0 5180	718.0 5286	421.0 5015	301.0 5220	237.0 5011	816.0 5204	703.0 5117
8TH SMALLEST	935.0 5230	793.0 5170	720.0 5070	423.0 5077	302.0 5211	238.0 5286	82.0 5209	703.0 5091
9TH SMALLEST	935.0 5211	797.0 5070	721.0 5131	425.0 5221	302.0 5099	241.0 5221	821.0 5150	708.0 5029
10TH SMALLEST	936.0 5186	797.0 5041	721.0 5008	425.0 5036	304.0 5029	242.0 5185	825.0 5253	709.0 5254

XTH LARGEST	1148.0 5016	986.0 5021	887.0 5050	629.0 5257	370.0 5270	300.0 5269	960.0 5007	840.0 5239
9TH LARGEST	1148.0 5021	990.0 5060	889.0 5060	630.0 5243	371.0 5016	301.0 5016	966.0 5088	841.0 5051
8TH LARGEST	1148.0 5116	990.0 5185	890.0 5130	630.0 5264	371.0 5230	302.0 5267	966.0 5192	841.0 5111
7TH LARGEST	1155.0 5257	991.0 5150	890.0 5207	630.0 5130	372.0 5181	302.0 5279	969.0 5164	844.0 5009
6TH LARGEST	1156.0 5118	992.0 5278	893.0 5021	642.0 5017	373.0 5264	304.0 5130	970.0 5130	844.0 5125
5TH LARGEST	1163.0 5279	1004.0 5264	896.0 5257	643.0 5207	373.0 5051	304.0 5279	976.0 5050	853.0 5168
4TH LARGEST	1169.0 5013	1009.0 5279	900.0 5132	646.0 5130	376.0 5130	305.0 5017	979.0 5009	851.0 5058
3RD LARGEST	1175.0 5267	1024.0 5267	909.0 5279	649.0 5013	379.0 5060	305.0 5181	982.0 5051	859.0 5267
2ND LARGEST	1190.0 5091	1029.0 5130	913.0 5037	657.0 5279	387.0 5013	306.0 5021	996.0 5207	865.0 5085
1ST LARGEST	1191.0 5017	1034.0 5051	946.0 5051	658.0 5051	393.0 5267	310.0 5017	1002.0 5035	867.0 5264
THE MEAN VALUE								
STD. DEVIATION								
COEFF/VARIATION								
VETA ONE								
VETA TWO								
(N-20)-AVG EST								
(N-20)-S.D. EST								
PCT DIFF/MEANS								
PCT DIFF/ST DJS								
SIZE OF SAMPLE								

THE ARMY MEN (FEBRUARY 1977)

DEPT. OF THE ARMY COPY

STATISTICS FOR VARIABLES 13C THROUGH 19C

	13C	11T	14C	15C	16C	17C	18C	19C
	SHLDER-EL	ELBOW-CTR	ELBOW-FIN	KNEE HEIG	POPLITEAL	BUTTOCK-K	CHESL DEP	WAIST DEP
	BOM LGTH	GRIP LGT	GERTIF LG	HT/SIT	HEIGHT	NEE LENG	TH	TH
	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE
1ST SMALLEST	312.0 5159	203.0 5159	400.0 5159	+65.0 5018	370.0 5230	524.0 5042	175.0 5184	160.0 5068
2ND SMALLEST	312.0 5015	297.0 5042	400.0 5042	+09.0 5042	373.0 5159	520.0 5159	175.0 5104	164.0 5238
3RD SMALLEST	315.0 5042	311.0 5266	408.0 5015	472.0 5159	374.0 5018	533.0 5008	178.0 5182	165.0 5199
4TH SMALLEST	317.0 5180	307.0 5033	+21.0 5280	+75.0 5011	374.0 5011	536.0 5100	179.0 5286	165.0 5191
5TH SMALLEST	322.0 5220	307.0 5019	+21.0 5008	+78.0 5230	375.0 5280	537.0 5015	180.0 5042	168.0 5035
6TH SMALLEST	324.0 5070	308.0 5220	+28.0 5011	+84.0 5280	379.0 5042	539.0 5069	182.0 5195	169.0 5079
7TH SMALLEST	326.0 5230	310.0 5011	+30.0 5060	+88.0 5015	383.0 5070	540.0 5011	182.0 5187	171.0 5250
8TH SMALLEST	327.0 5286	311.0 5230	+31.0 5180	+89.0 5180	385.0 5175	541.0 5280	184.0 5236	171.0 5229
9TH SMALLEST	327.0 5041	311.0 5166	+32.0 5132	+92.0 5070	388.0 5015	551.0 5002	184.0 5024	173.0 5254
10TH SMALLEST	328.0 5008	312.0 5160	+33.0 5230	+94.0 5170	390.0 5221	550.0 5130	186.0 5033	173.0 5101
11TH LARGEST	397.0 5016	387.0 5267	526.0 5279	005.0 5209	491.0 5185	663.0 5060	202.0 5037	257.0 5017
12TH LARGEST	398.0 5181	390.0 5051	527.0 5051	006.0 5122	494.0 5122	664.0 5267	202.0 5165	260.0 5167
13TH LARGEST	399.0 5000	391.0 5279	527.0 5267	009.0 5021	495.0 5021	665.0 5181	202.0 5276	260.0 5175
14TH LARGEST	399.0 5007	392.0 5243	529.0 5156	014.0 5297	496.0 5021	666.0 5058	203.0 5041	263.0 5053
15TH LARGEST	402.0 5279	395.0 5017	533.0 5007	017.0 5007	490.0 5269	669.0 5165	203.0 5222	264.0 5037
16TH LARGEST	404.0 5204	397.0 5013	533.0 5243	019.0 5017	501.0 5007	672.0 5279	203.0 5056	264.0 5059
17TH LARGEST	406.0 5031	397.0 5270	536.0 5013	020.0 5130	504.0 5130	670.0 5264	205.0 5083	266.0 5222
18TH LARGEST	408.0 5013	401.0 5181	536.0 5181	024.0 5013	509.0 5013	677.0 5021	206.0 5090	266.0 5086
19TH LARGEST	413.0 5130	403.0 5130	543.0 5021	030.0 5051	521.0 5051	690.0 5017	272.0 5050	282.0 5056
20TH LARGEST	418.0 5207	408.0 5021	546.0 5130	032.0 5279	520.0 5279	703.0 5051	272.0 5175	288.0 5058
THE MEAN VALUE	303.16	349.72	477.71	520.90	442.73	607.01	210.80	202.88
STD. DEVIATION	16.53	19.63	24.72	30.23	27.16	30.75	19.97	22.54
COEFF/VARIATION	5.40	5.61	5.17	5.79	6.14	5.06	9.21	11.11
VETA ONE	.03	-0.00	-0.05	-0.04	-0.06	.03	.03	.98
VETA TWO	3.06	3.44	3.33	3.06	3.02	3.01	2.04	4.04
(N-20)-AVG EST	363.19	349.67	477.77	551.10	442.91	507.89	210.34	201.75
(N-20)-S.D. EST	16.38	19.06	24.20	29.90	20.95	30.65	20.39	22.00
PCT DIFF/MEANS	-0.	0.	-0.	-0.	-1.	-0.	2.	5.
PCT DIF/ST D/S	1.	3.	2.	1.	1.	0.	-2.	2.
SIZE OF SAMPLE	287	287	287	287	287	287	287	280

DATA FILE 001

STATISTICS FOR VARIABLES 161 THROUGH 330

	161	250	270	290	310	330
	BIACROMIA	SHOULDER	CHEST CIR	WAIST CIR	HIP CIRCUM	BICEPS CI
	L BREADTH	CIRCUMFER	CUMFERENC	C/NATURAL	MFERENCE	RC, FLXD
	VALUE SUBJCT	VALUE SUBJCT	VALUE SUBJCT	VALUE SUBJCT	VALUE SUBJCT	VALUE SUBJCT
1ST SMALLEST	330.0 5168	955.0 5042	767.1 5207	634.0 5058	838.0 5068	220.0 5005
2ND SMALLEST	344.0 5106	977.0 5068	795.0 5066	642.0 5238	854.0 5207	228.0 5207
3RD SMALLEST	347.0 5042	989.0 5226	806.0 5033	660.0 5207	853.0 5226	235.0 5068
4TH SMALLEST	340.0 5035	903.0 5183	809.0 5000	661.0 5008	861.0 5183	236.0 5104
5TH SMALLEST	353.0 5120	991.0 5217	812.0 5045	661.0 5008	864.0 5005	239.0 5110
6TH SMALLEST	354.0 5226	993.0 5134	816.0 5104	670.0 5193	865.0 5176	240.0 5205
7TH SMALLEST	355.0 5234	994.0 5005	823.0 5042	670.0 5035	865.0 5176	242.0 5172
8TH SMALLEST	357.0 5219	998.0 5100	828.0 5184	676.0 5199	867.0 5203	242.0 5042
9TH SMALLEST	357.0 5098	1000.0 5104	831.0 5040	676.0 5155	867.0 5033	244.0 5180
10TH SMALLEST	358.0 5170	1001.0 5120	837.0 5178	677.0 5202	869.0 5142	247.0 5176

XTH LARGEST	430.0 5165	1224.0 5009	1068.0 5012	980.0 5165	1080.0 5129	345.0 5017
9TH LARGEST	430.0 5141	1224.0 5094	1070.0 5119	980.0 5165	1080.0 5054	346.0 5009
8TH LARGEST	431.0 5026	1230.0 5056	1077.0 5050	973.0 5037	1090.0 5059	347.0 5059
7TH LARGEST	433.0 5048	1238.0 5175	1083.0 5117	990.0 5053	1090.0 5090	352.0 5058
6TH LARGEST	435.0 5279	1239.0 5050	1091.0 5270	1003.0 5090	1097.0 5083	352.0 5000
5TH LARGEST	436.0 5112	1248.0 5119	1092.0 5090	1020.0 5175	1105.0 5019	357.0 5030
4TH LARGEST	436.0 5021	1252.0 5017	1099.0 5222	1041.0 5059	1105.0 5181	357.0 5181
3RD LARGEST	439.0 5114	1256.0 5093	1109.0 5083	1057.0 5056	1133.0 5017	359.0 5056
2ND LARGEST	440.0 5131	1293.0 5181	1110.0 5056	1060.0 5222	1133.0 5080	379.0 5222
1ST LARGEST	449.0 5264	1331.0 5083	1112.0 5175	1082.0 5058	1136.0 5222	381.0 5060
						390.0 5058

THE MEAN VALUE	394.56	1109.22	929.03	780.76	951.43	313.78
STD. DEVIATION	19.62	61.42	66.01	60.40	60.43	27.14
COEFF. OF VARIATION	5.02	5.54	7.11	7.77	6.35	8.65
VETA ONE	-0.13	0.29	0.56	1.00	0.77	0.13
VETA TWO	2.62	2.06	2.63	3.97	3.10	2.65
(N-20)-AVG EST	394.64	1108.45	927.23	780.89	949.06	313.68
(N-20)-S.D. EST	20.09	62.51	67.43	79.42	62.02	27.89
PCT DIFF/MEANS	-0.	1.	3.	5.	4.	0.
PCT DIFF/ST OVS	-1.	-2.	-2.	1.	-3.	-3.
SIZE OF SAMPLE	267	287	267	287	297	297

THE ARMY MEN (FEBRUARY 1977)

15

STATISTICS FOR VARIABLES 161 THROUGH 330

	16T			25C			27C			29C			19T			30C			23T			33C		
	BIACROMIA			SHOULDER			CHEST CIR			WAIST CIR			HAISI CIR			HIP CIRCU			BICEPS CI			BICEPS CI		
	L BREADTH			CIRCUMFER			CUMFERENC			C/NATURAL			C/OMPHALI			MFERENCE			RC, RLXO			RC, FLXO		
	VALUE	SBJCT		VALUE	SBJCT		VALUE	SBJCT		VALUE	SBJCT		VALUE	SBJCT		VALUE	SBJCT		VALUE	SBJCT		VALUE	SBJCT	
1ST SMALLEST	336.0	5168		953.0	5042		787.0	5207		634.0	5068		634.0	5068		836.0	5068		220.0	5005		238.0	5005	
2ND SMALLEST	344.0	5106		977.0	5068		795.0	5066		650.0	5230		642.0	5238		854.0	5207		228.0	5207		249.0	5237	
3RD SMALLEST	347.0	5042		989.0	5226		806.0	5033		660.0	5207		660.0	5207		853.0	5226		235.0	5068		250.0	5042	
4TH SMALLEST	348.0	50035		999.0	5183		809.0	5000		661.0	5000		661.0	5195		861.0	5183		236.0	5104		257.0	5068	
5TH SMALLEST	353.0	5120		991.0	5207		812.0	5005		662.0	5005		661.0	5008		864.0	5042		239.0	5110		260.0	5205	
6TH SMALLEST	354.0	5226		993.0	5134		816.0	5104		672.0	5172		672.0	5199		864.0	5005		240.0	5205		260.0	5118	
7TH SMALLEST	355.0	5234		994.0	5005		823.0	5042		675.0	5155		670.0	5005		865.0	5176		242.0	5172		262.0	5104	
8TH SMALLEST	357.0	5219		998.0	5005		828.0	5184		676.0	5199		672.0	5172		867.0	5203		242.0	5042		266.0	5033	
9TH SMALLEST	357.0	5098		1000.0	5104		831.0	5040		678.0	5005		675.0	5155		867.0	5033		244.0	5183		267.0	5172	
10TH SMALLEST	358.0	5170		1001.0	5120		837.0	5178		677.0	5206		675.0	5042		869.0	5142		247.0	5176		267.0	5072	

XTH LARGEST	430.0	5165		1224.0	5009		1068.0	5012		900.0	5086		900.0	5165		1000.0	5129		345.0	5017		362.0	5122	
9TH LARGEST	430.0	5141		1224.0	5094		1070.0	5019		901.0	5165		900.0	5037		1000.0	5034		346.0	5009		363.0	5246	
8TH LARGEST	431.0	5026		1230.0	5056		1077.0	5056		903.0	5037		990.0	5053		1000.0	5090		347.0	5059		364.0	5083	
7TH LARGEST	431.0	5048		1238.0	5175		1083.0	5017		900.0	5003		1003.0	5030		1000.0	5090		352.0	5056		366.0	5056	
6TH LARGEST	435.0	5279		1239.0	5050		1091.0	5270		903.0	5050		1003.0	5175		1007.0	5083		352.0	5000		369.0	5272	
5TH LARGEST	436.0	5112		1248.0	5019		1092.0	5030		902.0	5175		1035.0	5019		1105.0	5019		357.0	5030		372.0	5181	
4TH LARGEST	436.0	5021		1252.0	5017		1099.0	5222		904.0	5009		1041.0	5059		1112.0	5181		357.0	5181		374.0	5090	
3RD LARGEST	439.0	5114		1256.0	5090		1109.0	5083		904.0	5009		1057.0	5056		1133.0	5017		359.0	5056		379.0	5222	
2ND LARGEST	446.0	5131		1293.0	5181		1110.0	5056		905.0	5009		1060.0	5222		1139.0	5222		361.0	5000		381.0	5060	
1ST LARGEST	449.0	5264		1301.0	5083		1112.0	5175		905.0	5056		1082.0	5058		1130.0	5050		361.0	5222		390.0	5050	
THE MEAN VALUE	394.56			1109.22			929.03			780.76			788.75			951.43			291.02			313.78		
STD. DEVIATION	19.82			61.42			66.01			80.40			52.94			60.43			27.68			27.14		
COEFF. OF VARIATION	5.02			5.54			7.11			10.22			6.72			6.35			9.49			8.65		
MEAN ONE	-13			.29			.50			1.00			1.11			.77			.24			.13		
MEAN TWO	2.02			2.06			2.03			3.97			4.08			3.10			2.75			2.65		
(N-2)-AVG EST	394.64			1108.45			927.23			782.85			784.50			949.06			291.20			313.68		
(N-2)-S.D. EST	20.09			62.51			67.43			79.42			51.17			62.32			28.14			27.89		
PCT DIFF/MEANS	-0.			1.			3.			5.			2.			4.			1.			0.		
PCT DIFF/STD	-1.			-2.			-2.			1.			2.			-3.			-2.			-3.		
SIZE OF SAMPLE	267			287			267			287			287			287			287			287		

THE ARMY MEN (FEBRUARY 1977)

STATISTICS FOR VARIABLES 39C THROUGH 47C

	39C	40C	42C	43C	44C	45C	46C	47C
	CALF CIRC	ANKLE CIRC	INTERSCYE	INTERSCYE	BACK ARC,	BACK ARC,	BACK ARC,	WAIST BAC
	UMPERENCE	CUMFERENCE	BACK	FRONT	CHESI	MAIST	HIP	K
	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE
	SBJCT	SBJCT	SBJCT	SBJCT	SBJCT	SBJCT	SBJCT	SBJCT
1ST	SMALLEST	285.0 5008	332.0 5049	317.0 5005	378.0 5008	311.0 5238	395.0 5176	377.0 5241
2ND	SMALLEST	294.0 5199	334.0 5046	321.0 5042	380.0 5238	314.0 5266	409.0 5087	380.0 5091
3RD	SMALLEST	296.0 5226	344.0 5106	324.0 5204	394.0 5005	319.0 5068	413.0 5159	380.0 5019
4TH	SMALLEST	297.0 5068	346.0 5105	325.0 5226	395.0 5011	320.0 5282	414.0 5183	382.0 5131
5TH	SMALLEST	301.0 5238	354.0 5134	327.0 5109	396.0 5033	322.0 5042	415.0 5105	382.0 5120
6TH	SMALLEST	304.0 5176	355.0 5286	328.0 5183	399.0 5104	324.0 5195	415.0 5033	384.0 5251
7TH	SMALLEST	305.0 5253	359.0 5130	329.0 5204	400.0 5286	329.0 5199	417.0 5226	385.0 5008
8TH	SMALLEST	306.0 5172	356.0 5199	329.0 5109	400.0 5195	325.0 5105	416.0 5207	386.0 5253
9TH	SMALLEST	313.0 5104	357.0 5149	330.0 5219	400.0 5072	327.0 5005	420.0 5199	388.0 5230
XTH	SMALLEST	311.0 5042	359.0 5097	330.0 5176	401.0 5024	328.0 5015	420.0 5160	390.0 5080

XTH	LARGEST	415.0 5217	405.0 5175	407.0 5106	422.0 5059	482.0 5094	535.0 5019	510.0 5237
9TH	LARGEST	416.0 5181	408.0 5157	407.0 5161	424.0 5165	484.0 5037	535.0 5041	511.0 5090
8TH	LARGEST	418.0 5269	408.0 5248	426.0 5048	526.0 5217	488.0 5086	535.0 5059	513.0 5061
7TH	LARGEST	419.0 5240	409.0 5012	427.0 5132	527.0 5083	492.0 5090	536.0 5094	514.0 5082
6TH	LARGEST	420.0 5168	473.0 5130	430.0 5222	530.0 5017	496.0 5175	540.0 5017	518.0 5168
5TH	LARGEST	422.0 5105	475.0 5009	435.0 5204	535.0 5222	497.0 5053	540.0 5110	519.0 5239
4TH	LARGEST	424.0 5083	475.0 5021	440.0 5279	540.0 5279	532.0 5059	549.0 5181	520.0 5244
3RD	LARGEST	429.0 5045	475.0 5240	541.0 5056	541.0 5056	544.0 5050	550.0 5090	521.0 5217
2ND	LARGEST	435.0 5090	476.0 5239	546.0 5244	546.0 5244	560.0 5222	555.0 5222	528.0 5058
1ST	LARGEST	440.0 5264	481.0 5181	547.0 5090	547.0 5090	573.0 5058	584.0 5058	530.0 5051

THE MEAN VALUE	350.25	217.07	416.18	366.67	451.73	389.61	405.65	449.01
STD. DEVIATION	27.97	14.23	26.09	19.66	33.69	42.76	31.31	32.03
COEFF/VARIATION	7.81	6.56	6.85	5.34	7.46	10.98	6.72	7.13
VETA ONE	.26	.12	.02	.10	.59	1.18	.71	.07
VETA TWO	2.93	2.76	2.82	2.71	2.81	4.95	3.26	2.65

(N-20) - AVG EST	397.95	217.00	416.13	366.56	450.79	387.47	404.60	448.87
(N-20) - S.D. EST	28.11	14.46	26.31	19.98	34.70	40.75	31.66	32.96

PCT DIFF/MEANS	1.	1.	0.	1.	3.	5.	3.	0.
PCT DIF/ST DVS	-1.	-2.	-1.	-2.	-3.	5.	-1.	-3.

SIZE OF SAMPLE	287	287	287	267	287	287	287	287
----------------	-----	-----	-----	-----	-----	-----	-----	-----

THE ARMY MEN (FEBRUARY 1977)

BEST AVAILABLE COPY

STATISTICS FOR VARIABLES 48C THROUGH 58C

BEST AVAILABLE COPY

	48C	51C	52C	54C	55C	56C	57C	58C
	WAIST FRO NT	SLEEVE IN SEAM	SLEEVE OU TSEAM	HEAD CIRC UMFERENCE	HEAD BREA DTH	HEAD LENG TH	PALM LENG TH	HAND BREA DTH
	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE
1ST SMALLEST	326.0 5253	389.0 5159	473.0 5159	516.0 5049	137.0 5172	160.0 5068	90.0 5012	78.0 5226
2ND SMALLEST	326.0 5019	402.0 5015	504.0 5042	518.0 5019	138.0 5108	175.0 5049	91.0 5042	76.0 5068
3RD SMALLEST	343.0 5120	413.0 5042	510.0 5115	519.0 5184	139.0 5252	170.0 5194	93.0 5008	79.0 5180
4TH SMALLEST	344.0 5035	426.0 5223	516.0 5230	520.0 5006	139.0 5049	170.0 5260	94.0 5159	79.0 5042
5TH SMALLEST	345.0 5004	427.0 5106	521.0 5211	522.0 5194	140.0 5236	178.0 5108	95.0 5180	80.0 5008
6TH SMALLEST	346.0 5111	427.0 5011	523.0 5220	523.0 5168	140.0 5047	179.0 5102	96.0 5242	81.0 5184
7TH SMALLEST	348.0 5191	429.0 5286	525.0 5221	525.0 5220	141.0 5184	180.0 5115	96.0 5186	82.0 5176
8TH SMALLEST	350.0 5235	430.0 5008	525.0 5071	525.0 5112	141.0 5103	180.0 5019	97.0 5250	82.0 5134
9TH SMALLEST	352.0 5241	431.0 5233	526.0 5180	525.0 5042	141.0 5162	181.0 5220	97.0 5106	82.0 5127
XTH SMALLEST	522.0 5108	432.0 5211	526.0 5011	527.0 5220	141.0 5105	181.0 5105	97.0 5010	82.0 5121

XTH LARGEST	470.0 5041	535.0 5181	622.0 5021	589.0 5005	160.0 5179	200.0 5140	118.0 5130	97.0 5130
9TH LARGEST	470.0 5085	536.0 5051	655.0 5051	590.0 5123	161.0 5034	200.0 5234	119.0 5070	98.0 5001
8TH LARGEST	471.0 5211	537.0 5001	655.0 5206	590.0 5212	162.0 5017	208.0 5246	119.0 5080	98.0 5058
7TH LARGEST	471.0 5217	540.0 5021	653.0 5013	590.0 5255	162.0 5266	208.0 5277	119.0 5165	98.0 5074
6TH LARGEST	473.0 5168	540.0 5270	659.0 5279	592.0 5103	164.0 5113	203.0 5253	119.0 5269	98.0 5078
5TH LARGEST	477.0 5051	545.0 5130	660.0 5130	595.0 5207	164.0 5222	213.0 5134	120.0 5021	98.0 5208
4TH LARGEST	478.0 5239	548.0 5206	660.0 5181	590.0 5113	165.0 5037	211.0 5250	120.0 5058	98.0 5212
3RD LARGEST	478.0 5262	552.0 5007	660.0 5270	597.0 5009	165.0 5009	213.0 5030	120.0 5067	98.0 5244
2ND LARGEST	480.0 5192	552.0 5267	666.0 5317	601.0 5256	165.0 5117	213.0 5207	121.0 5130	99.0 5051
1ST LARGEST	490.0 5222	563.0 5013	669.0 5207	603.0 5200	167.0 5270	214.0 5007	121.0 5204	100.0 5009

THE MEAN VALUE	410.47	482.64	587.73	500.07	150.52	194.38	107.51	89.23
STD. DEVIATION	30.30	27.25	32.28	16.20	5.37	7.32	5.79	4.29
COEFF. OF VARIATION	7.36	6.65	5.49	3.24	3.56	3.61	5.38	4.80
VETA ONE	.00	.03	.04	-.15	.17	-.14	-.10	.04
VETA TWO	2.91	3.31	3.10	3.01	3.34	3.63	2.86	2.64
(N-20)-AVG EST	410.54	482.65	587.77	500.21	150.48	194.72	107.54	89.23
(N-20)-S.D. EST	30.58	26.77	32.03	16.26	5.36	6.01	5.67	4.42
PCT DIFF/MEANS	-0.	-0.	-0.	-1.	1.	-.	-1.	0.
PCT JIF/ST OVS	-1.	2.	1.	-0.	3.	3.	-1.	-3.
SIZE OF SAMPLE	287	287	287	287	287	287	287	287

THE ARMY MEN (FEBRUARY 1977)

DEPT. OF THE ARMY

STATISTICS FOR VARIABLES 59C THROUGH 69C

	59C	60C	61C	62C	63C	64C	66C	69C
	HAND CIRC UMPERENCE	HAND LENG TH	INSTEP LE NGTH	FOOT LENG TH	HEEL-ANKL CIRCUMF	FOOT BREA DTH	FOOT CIRC UMPERENCE	SPHYRION HEIGHT
	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE
1ST SMALLEST	181.0 5226	159.0 5042	168.0 5011	225.0 5042	285.0 5008	81.0 5220	215.0 5220	55.0 5105
2ND SMALLEST	185.0 5180	163.0 5015	169.0 5127	234.0 5159	291.0 5042	81.0 5068	216.0 5042	60.0 5268
3RD SMALLEST	186.0 5042	165.0 5008	170.0 5180	235.0 5008	299.0 5286	84.0 5042	226.0 5227	60.0 5216
4TH SMALLEST	189.0 5068	166.0 5159	174.0 5213	236.0 5011	299.0 5176	87.0 5136	222.0 5068	60.0 5120
5TH SMALLEST	190.0 5260	170.0 5106	174.0 5153	237.0 5015	301.0 5180	86.0 5227	223.0 5008	60.0 5089
6TH SMALLEST	191.0 5038	171.0 5086	173.0 5274	240.0 5170	300.0 5199	87.0 5260	225.0 5260	60.0 5018
7TH SMALLEST	193.0 5120	172.0 5256	173.0 5099	240.0 5127	307.0 5068	87.0 5206	226.0 5229	61.0 5070
8TH SMALLEST	194.0 5227	172.0 5180	173.0 5086	240.0 5066	308.0 5238	88.0 5280	226.0 5160	61.0 5017
9TH SMALLEST	194.0 5134	172.0 5011	174.0 5042	241.0 5106	308.0 5159	88.0 5164	229.0 5199	62.0 5180
10TH SMALLEST	195.0 5203	173.0 5186	175.0 5047	242.0 5153	310.0 5226	89.0 5160	230.0 5176	62.0 5177

XTH LARGEST	230.0 5156	207.0 5116	219.0 5090	290.0 5038	374.0 5038	110.0 5017	276.0 5060	85.0 5123
9TH LARGEST	231.0 5078	207.0 5197	221.0 5029	290.0 5058	375.0 5264	110.0 5051	277.0 5078	85.0 5182
8TH LARGEST	231.0 5123	208.0 5138	221.0 5257	292.0 5270	377.0 5013	110.0 5060	277.0 5090	86.0 5056
7TH LARGEST	231.0 5208	208.0 5156	222.0 5023	295.0 5048	377.0 5029	110.0 5078	277.0 5208	86.0 5059
6TH LARGEST	232.0 5051	208.0 5243	222.0 5058	295.0 5130	377.0 5058	110.0 5208	278.0 5138	86.0 5168
5TH LARGEST	232.0 5244	209.0 5264	223.0 5051	295.0 5217	378.0 5020	110.0 5257	280.0 5058	86.0 5187
4TH LARGEST	235.0 5122	210.0 5115	223.0 5209	295.0 5257	378.0 5027	111.0 5264	280.0 5264	87.0 5021
3RD LARGEST	236.0 5058	210.0 5257	224.0 5048	296.0 5051	378.0 5269	112.0 5058	281.0 5051	87.0 5130
2ND LARGEST	238.0 5139	213.0 5130	227.0 5270	296.0 5060	380.0 5021	114.0 5009	284.0 5009	89.0 5013
1ST LARGEST	240.0 5009	217.0 5021	230.0 5060	296.0 5116	390.0 5217	115.0 5196	285.0 5269	94.0 5006
THE MEAN VALUE	211.12	190.01	197.00	267.58	346.22	99.17	251.54	73.83
STD. DEVIATION	9.98	9.80	11.73	13.33	17.44	5.62	12.85	6.13
COEFF/VARIATION	4.73	5.19	5.98	4.98	5.13	5.67	5.11	8.31
VETA ONE	.08	-.13	.02	-.16	.07	-.12	.10	-.03
VETA TWO	2.96	2.76	2.83	2.60	3.14	3.31	2.88	2.97
(N-20)-AVG EST	211.07	190.08	197.03	267.73	346.22	99.23	251.56	73.85
(N-20)-S.D. EST	10.02	10.09	11.92	13.57	17.38	5.52	12.94	6.15
PCT DIFF/MEANS	0.	-1.	0.	-1.	-0.	-1.	-0.	-0.
PCT DIF/ST DVS	-0.	-2.	-1.	-2.	0.	2.	-1.	-0.
SIZE OF SAMPLE	287	287	286	286	287	286	287	286

BEST AVAILABLE COPY

STATISTICS FOR VARIABLES 29T THROUGH 30T

	29T	30T
	WAIST HT/ UNPHALION	MI/SHOULDO ER HEIGHT
	VALUE SUBJECT	VALUE SUBJECT
1ST SMALLEST	895.0 5008	528.0 5120
2ND SMALLEST	899.0 5042	537.0 5068
3RD SMALLEST	910.0 5159	540.0 5008
4TH SMALLEST	929.0 5011	540.0 5091
5TH SMALLEST	941.0 5015	552.0 5169
6TH SMALLEST	944.0 5070	553.0 5209
7TH SMALLEST	946.0 5101	553.0 5101
8TH SMALLEST	947.0 5230	559.0 5042
9TH SMALLEST	947.0 5086	560.0 5089
XTH SMALLEST	949.0 5170	562.0 5057

XTH LARGEST	1153.0 5017	672.0 5079
9TH LARGEST	1155.0 5116	674.0 5125
8TH LARGEST	1159.0 5267	680.0 5259
7TH LARGEST	1161.0 5021	682.0 5009
6TH LARGEST	1161.0 5257	683.0 5106
5TH LARGEST	1161.0 5264	693.0 5217
4TH LARGEST	1173.0 5130	690.0 5058
3RD LARGEST	1175.0 5013	687.0 5085
2ND LARGEST	1185.0 5279	689.0 5267
1ST LARGEST	1199.0 5051	692.0 5051

THE MEAN VALUE 1054.70 613.69
 STD. DEVIATION 52.67 30.28
 COEFF/VARIATION 4.99 4.93
 WETA ONE -.00 .00
 WETA TWO 3.11 2.89

(N-20)-AVG EST 1055.07 613.74
 (N-20)-S.D.EST 52.25 30.38

PCT DIFF/MEANS -1. 0.
 PCT DIF/ST DVS 1. -0.

SIZE OF SAMPLE 287 287

THE ARMY MEN (FEBRUARY 1977)

A SUMMARY OF THE MATERIAL ALREADY PRESENTED EITHER ON THE PRECEDING PAGES OR ON THE PUNCHED RANGE CARDS

NO.	VARIABLE NAME	MEAN	STD DEV	V-I	V-II	V	DELTA	DELS	N	MINIMUM	MIN	MAX	AVG	INTV1	INTV2	CF1	CF2
1C	WEIGHT	1560.16	242.16	.61	2.94	12.52	2.7	-1.5	287	1025.0	1017.5	2533.0	01560.0	50.00	30.00	.04536	2.20462
2C	AXILLA	1740.74	60.19	.00	3.54	3.92	-1.1	4.1	267	1530.0	1527.5	25974.0	01741.0	15.00	10.00	.10000	.39370
4C	AXILLA HEIGHT	1312.44	58.89	.00	3.25	4.52	-1.6	1.6	287	1133.0	1127.5	25197.0	01312.0	15.00	10.00	.10000	.39370
21	SUPRASTERNAL HEIGHT	1426.99	60.85	.01	3.37	4.32	-1.0	2.8	287	1246.0	1237.5	251427.0	01427.0	15.00	10.00	.10000	.39370
3C	CHEST HEIGHT	1274.26	56.71	.04	3.22	4.52	-1.5	1.0	287	1103.0	1097.5	251466.0	01274.0	15.00	10.00	.10000	.39370
5C	SUBSTERNAL HEIGHT	1225.68	54.94	.15	3.38	4.52	-1.9	1.0	287	1038.0	1037.5	251402.0	01226.0	15.00	10.00	.10000	.39370
4T	ELBOW HEIGHT	1034.02	50.54	.03	3.28	4.62	-1.1	1.8	287	945.0	937.5	251264.0	01034.0	15.00	10.00	.10000	.39370
5T	KNUCKLE HEIGHT	755.07	41.15	.05	3.26	5.42	-1.1	1.3	287	624.0	617.5	25895.0	00755.0	10.00	10.00	.10000	.39370
6C	WAIST HT/NATURAL	1041.18	57.46	.04	2.67	5.52	-1.4	3.0	267	906.0	897.5	251191.0	01041.0	10.00	10.00	.10000	.39370
6C	BUTTOCK HEIGHT	894.08	50.69	.01	3.09	5.52	-1.1	2.2	287	755.0	747.5	251054.0	00894.0	15.00	10.00	.10000	.39370
7T	GLUTEAL FURROW HT	803.71	44.17	.06	3.16	5.52	-1.1	2.2	287	661.0	657.5	25946.0	00804.0	10.00	10.00	.10000	.39370
8T	TIBIALE HEIGHT	483.14	27.68	.14	3.18	5.72	-1.2	1.7	283	404.0	402.5	25584.0	00483.0	5.00	5.00	.10000	.39370
9T	ACROMION-RADIALE	337.42	18.23	.01	3.05	5.42	-1.3	1.4	287	279.0	278.5	25393.0	00337.0	5.00	5.00	.10000	.39370
10T	RADIALE-STYLION	268.41	15.75	.03	3.25	5.92	-1.1	1.6	287	216.0	215.5	25315.0	00268.0	5.00	5.00	.10000	.39370
11C	SITTING HEIGHT	893.43	36.32	.05	3.34	4.12	-1.1	2.3	287	783.0	777.5	251002.0	00893.0	10.00	10.00	.10000	.39370
12C	EYE HEIGHT/SIT	774.17	33.92	.01	3.23	4.42	-1.4	1.8	287	660.0	607.5	25867.0	00774.0	5.00	5.00	.10000	.39370
13C	SHLOER-ELBOW LGTH	363.16	18.53	.03	3.06	5.12	-1.2	1.8	287	312.0	311.5	25418.0	00363.0	5.00	5.00	.10000	.39370
11T	ELBOW-CIR GRIP LGT	349.72	19.63	.04	3.44	5.62	-1.3	3.0	287	283.0	281.5	25408.0	00349.0	5.00	5.00	.10000	.39370
14C	ELBOW-FINGERTIP LG	477.71	24.72	.05	3.33	5.22	-1.2	2.1	287	400.0	398.5	25460.0	00478.0	5.00	5.00	.10000	.39370
15C	KNEE HEIGHT/SIT	550.96	30.23	.04	3.06	5.52	-1.5	1.1	287	465.0	462.5	25632.0	00551.0	10.00	10.00	.10000	.39370
16C	POPITEAL HEIGHT	442.73	27.16	.06	3.02	6.12	-1.7	1.8	287	370.0	367.5	25200.0	00443.0	10.00	10.00	.10000	.39370
17C	BUTTOCK-KNEE LENG	607.81	30.75	.03	3.11	5.12	-1.7	1.8	287	524.0	522.5	25703.0	00608.0	10.00	10.00	.10000	.39370
18C	CHEST DEPTH	216.80	19.97	.53	2.84	9.12	2.2	-2.1	287	175.0	173.5	25272.0	00217.0	5.00	5.00	.10000	.39370
19C	WAIST DEPTH	202.88	22.54	.98	4.04	11.12	5.1	2.5	280	169.0	158.5	25288.0	00203.0	5.00	5.00	.10000	.39370
16T	BIACROMIAL BREADTH	594.58	19.82	.13	2.86	5.92	-1.3	1.3	287	336.0	335.5	25449.0	00595.0	5.00	5.00	.10000	.39370
25C	SHOULDER CIRCUMFER	1109.22	61.42	.29	2.82	5.92	-1.2	1.7	287	953.0	947.5	251301.0	01109.0	15.00	10.00	.10000	.39370
27C	CHEST CIRCUMFERENC	929.03	66.01	.56	2.83	7.12	2.7	-2.2	287	787.0	777.5	251112.0	00929.0	15.00	10.00	.10000	.39370
29C	WAIST CIRC/NATURAL	786.76	80.40	1.06	3.97	10.22	4.9	1.2	287	634.0	627.5	251082.0	00787.0	20.00	10.00	.10000	.39370
19T	WAIST CIRC/OMPHALI	788.75	82.94	1.11	4.08	10.52	5.2	2.2	287	634.0	627.5	251082.0	00788.0	20.00	10.00	.10000	.39370
30C	HIP CIRCUMFERENCE	951.43	60.43	.77	3.10	6.42	3.8	-2.6	287	838.0	837.5	251138.0	00951.0	15.00	10.00	.10000	.39370
23T	BICEPS CIRC, FLXD	291.62	27.68	.24	2.75	9.52	1.3	-1.6	287	228.0	217.5	25381.0	00292.0	10.00	10.00	.10000	.39370
33C	BICEPS CIRC, FLXD	313.78	27.14	.13	2.65	8.62	1.1	-1.5	287	238.0	237.5	25390.0	00314.0	10.00	10.00	.10000	.39370
39C	CALF CIRCUMFERENCE	358.25	27.97	.28	2.93	7.82	1.1	-1.5	287	285.0	282.5	25440.0	00358.0	5.00	5.00	.10000	.39370
40C	ANKLE CIRCUMFERENCE	217.07	14.23	.12	2.76	6.62	1.5	-1.6	287	180.0	179.5	25260.0	00217.0	3.00	3.00	.10000	.39370
42C	INTERSCYE BACK	410.18	28.09	.02	2.82	6.82	1.2	-1.7	287	332.0	327.5	25481.0	00410.0	10.00	10.00	.10000	.39370
43C	INTERSCYE FRONT	366.67	19.60	.10	2.71	5.32	1.6	-1.9	287	317.0	315.5	25430.0	00367.0	5.00	5.00	.10000	.39370
44C	BACK ARC, CHEST	451.73	33.69	.59	2.81	7.52	2.7	-2.9	287	378.0	377.5	25470.0	00452.0	10.00	10.00	.10000	.39370
45C	BACK ARC, WAIST	389.61	42.76	1.18	4.95	11.02	5.2	4.9	267	311.0	307.5	25573.0	00390.0	10.00	10.00	.10000	.39370
46C	BACK ARC, HIP	465.65	31.31	.71	3.26	0.72	3.3	-1.1	287	395.0	392.5	25584.0	00466.0	10.00	10.00	.10000	.39370
47C	WAIST BACK	449.01	32.03	.07	2.65	7.12	1.4	-2.8	287	377.0	372.5	25530.0	00449.0	5.00	5.00	.10000	.39370
48C	WAIST FRONT	410.47	30.30	.03	2.91	7.42	-1.2	-2.9	287	326.0	322.5	25490.0	00410.0	10.00	10.00	.10000	.39370
51C	SLEEVE INSEAM	482.64	27.25	.03	3.31	5.62	-1.1	1.8	287	473.0	472.5	25563.0	00483.0	10.00	10.00	.10000	.39370
52C	SLEEVE OUTSEAM	587.73	32.28	.04	3.10	5.52	-1.1	1.6	287	518.0	515.5	25603.0	00588.0	10.00	10.00	.10000	.39370
54C	HEAD CIRCUMFERENCE	560.07	18.26	.15	3.01	2.92	-1.9	-1.1	287	518.0	515.5	25603.0	00560.0	3.00	3.00	.10000	.39370
55C	HEAD BREADTH	150.55	7.02	.17	3.03	3.62	1.5	-2.2	287	137.0	136.5	25167.0	00151.0	2.00	2.00	.10000	.39370
56C	HEAD LENGTH	194.68	7.02	.14	3.03	3.62	1.5	-2.2	287	160.0	167.5	25214.0	00195.0	1.00	1.00	.10000	.39370
57C	PALM LENGTH	107.51	5.79	.10	2.86	5.42	-1.5	-1.3	287	98.0	89.5	25121.0	00108.0	2.00	2.00	.10000	.39370
58C	HAND BREADTH	89.23	4.29	.04	2.64	4.82	1.0	-3.0	287	78.0	77.5	25100.0	00089.0	1.00	1.00	.10000	.39370
59C	HAND CIRCUMFERENCE	211.12	9.98	.06	2.96	4.72	1.4	-3.3	287	181.0	179.5	25240.0	00211.0	3.00	3.00	.10000	.39370
60C	HAND LENGTH	190.01	9.86	.13	2.76	5.22	-1.7	-2.3	287	159.0	157.5	25217.0	00190.0	2.00	2.00	.10000	.39370

A SUMMARY OF THE MATERIAL ALREADY PRESENTED EITHER ON THE PRECEDING PAGES OR ON THE PUNCHED RANGE CARDS

NO. VARIABLE NAME	MEAN	STD DEV	V-I	V-II	V	JELM	DELS	N	MINIMUM	MIN	MAX	AVG	---THE RANGE CARD VALUES---				CF1	CF2
													INTV1	INTV2	INTV3	INTV4		
61C INSTEP LENGTH	197.06	11.79	.02	2.83	6.02	.2	-1.1	206	168.0	167.5	230.0	197.0	3.00	2.00	2.00	2.00	.10000	.39370
62C FOOT LENGTH	267.50	13.33	-.16	2.80	5.02	-1.2	-1.0	206	225.0	223.5	296.0	268.0	3.00	2.00	2.00	2.00	.10000	.39370
63C HEEL-ANKLE CIRCUMF	340.22	17.44	.07	3.14	5.12	.0	.3	207	285.0	284.5	390.0	343.0	5.00	3.00	3.00	3.00	.10000	.39370
64C FOOT BREADTH	99.17	5.62	-.12	3.31	5.72	-2.6	1.9	206	81.0	80.5	115.0	99.0	2.00	1.00	1.00	1.00	.10000	.39370
66C FOOT CIRCUMFERENCE	251.54	12.85	.10	2.60	5.12	.1	-.7	207	215.0	213.5	245.0	252.0	3.00	2.00	2.00	2.00	.10000	.39370
69C SPHYRION HEIGHT	73.83	6.13	-.03	2.57	8.32	-.3	-.2	206	55.0	54.5	94.0	74.0	2.00	1.00	1.00	1.00	.10000	.39370
29T WAIST HT/OMPHALION	1054.70	52.67	-.08	3.11	5.02	-.7	.8	207	895.0	887.5	1199.0	1055.0	15.00	10.00	10.00	10.00	.10000	.39370
30T MIDSHOULDER HEIGHT	613.09	30.20	.00	2.69	4.92	.5	-.3	207	520.0	527.5	692.0	614.0	10.00	5.00	5.00	5.00	.10000	.39370

BEST AVAILABLE COPY

C-2. XVAL TABLES FOR THE WORKSPACE SUBSERIES

STATISTICS FOR VARIABLES 1 THROUGH 8

	1	2	3	4	5	6	7	8
	OVERHEAD	FUNCTIONA	FUNCT REA	OVERHEAD	FUNCTIONA	WEIGHT	STATURE	OVERHEAD
	REACH HT	L REACH	CH EXTEND	REACH SIT	L LEG LN	VALUE	VALUE	REACH BRD
	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE
1ST SMALLEST	1855.0	691.0	785.0	1189.0	1052.0	1075.0	1612.0	336.0
2ND SMALLEST	1953.0	703.0	827.0	1205.0	1092.0	1243.0	1617.0	342.0
3RD SMALLEST	1965.0	706.0	835.0	1242.0	1100.0	1258.0	1641.0	346.0
4TH SMALLEST	1978.0	712.0	836.0	1267.0	1101.0	1260.0	1680.0	350.0
5TH SMALLEST	1981.0	720.0	838.0	1267.0	1102.0	1265.0	1682.0	350.0
6TH SMALLEST	2001.0	722.0	839.0	1285.0	1105.0	1273.0	1685.0	351.0
7TH SMALLEST	2003.0	730.0	841.0	1287.0	1109.0	1283.0	1689.0	352.0
8TH SMALLEST	2005.0	736.0	845.0	1294.0	1109.0	1295.0	1691.0	352.0
9TH SMALLEST	2029.0	737.0	846.0	1298.0	1113.0	1335.0	1693.0	352.0
10TH SMALLEST	2031.0	738.0	850.0	1307.0	1115.0	1343.0	1706.0	353.0

11TH LARGEST	2290.0	857.0	1064.0	1446.0	1204.0	1909.0	1862.0	412.0
12TH LARGEST	2296.0	865.0	1067.0	1447.0	1267.0	1925.0	1867.0	413.0
13TH LARGEST	2296.0	865.0	1067.0	1447.0	1267.0	1925.0	1867.0	413.0
14TH LARGEST	2301.0	864.0	1012.0	1450.0	1268.0	1950.0	1884.0	414.0
15TH LARGEST	2303.0	868.0	1013.0	1450.0	1271.0	1950.0	1890.0	416.0
16TH LARGEST	2303.0	869.0	1020.0	1457.0	1279.0	2020.0	1897.0	423.0
17TH LARGEST	2313.0	874.0	1020.0	1490.0	1281.0	2030.0	1897.0	423.0
18TH LARGEST	2326.0	876.0	1024.0	1500.0	1281.0	2075.0	1901.0	427.0
19TH LARGEST	2338.0	882.0	1041.0	1515.0	1315.0	2173.0	1905.0	434.0
20TH LARGEST	2392.0	882.0	1045.0	1538.0	1316.0	2263.0	1964.0	441.0
THE MEAN VALUE	2151.05	797.51	916.64	1300.79	1185.51	1990.98	1779.48	384.99
STD. DEVIATION	94.16	41.18	52.21	58.50	52.38	218.26	52.55	20.55
COEFF/VARIATION	4.38	5.16	5.63	4.27	4.42	13.72	3.52	5.34
VECTA ONE	-0.09	-0.17	0.27	-0.04	0.11	0.59	0.06	0.09
VECTA TWO	3.16	2.87	2.74	3.82	2.65	3.17	3.26	2.63
(N-20)-AVG EST	2151.78	798.21	916.76	1368.73	1184.36	1978.73	1779.31	384.99
(N-20)-S.D. EST	93.48	40.31	52.13	54.64	55.17	220.28	60.96	20.65
PCT DIFF/MEANS	-1.0	-2.0	4.0	0.0	2.0	6.0	1.0	0.0
PCT DIF/ST DVS	1.0	2.0	-2.0	7.0	-5.0	-1.0	3.0	-0.0
SIZE OF SAMPLE	106	106	100	106	106	106	106	106

STATISTICS FOR VARIABLES 9 THROUGH 16

DET A 1111 1111

	9	10	11	12	13	14	15	16
	RENT TORS O HEIGHT VALUE SBJCT	RENT TORS O BREADTH VALUE SBJCT	KNEELING HEIGHT VALUE SBJCT	KNEELING LEG LENGT VALUE SBJCT	RENT KNEE HT SUPIN VALUE SBJCT	HORI LG K NEE'S BENT VALUE SBJCT	WEIGHT-NU DE VALUE SBJCT	STATURE-N UDE VALUE SBJCT
1ST SMALLEST	1203.0 5136	378.0 5142	1172.0 5068	572.0 5065	417.0 5159	1486.0 5251	1025.0 5008	1562.0 5159
2ND SMALLEST	1231.0 5283	397.0 5184	1179.0 5120	597.0 5159	436.0 5107	1490.0 5221	1173.0 5184	1586.0 5068
3RD SMALLEST	1236.0 5221	398.0 5105	1187.0 5159	617.0 5210	430.0 5111	1492.0 5068	1180.0 5199	1599.0 5120
4TH SMALLEST	1237.0 5252	423.0 5249	1221.0 5150	623.0 5221	430.0 5186	1502.0 5170	1185.0 5170	1634.0 5170
5TH SMALLEST	1257.0 5238	413.0 5368	1226.0 5283	636.0 5178	441.0 5068	1502.0 5120	1200.0 5207	1635.0 5077
6TH SMALLEST	1258.0 5147	409.0 5120	1226.0 5077	641.0 5170	441.0 5077	1509.0 5159	1218.0 5120	1636.0 5221
7TH SMALLEST	1262.0 5134	412.0 5278	1226.0 5194	643.0 5107	449.0 5104	1513.0 5283	1225.0 5104	1638.0 5283
8TH SMALLEST	1264.0 5179	418.0 5143	1232.0 5271	645.0 5234	451.0 5194	1514.0 5184	1235.0 5159	1653.0 5148
9TH SMALLEST	1274.0 5210	419.0 5215	1232.0 5209	648.0 5111	456.0 5084	1519.0 5271	1283.0 5203	1660.0 5136
10TH SMALLEST	1275.0 5277	419.0 5208	1232.0 5200	649.0 5208	459.0 5112	1521.0 5200	1283.0 5142	1663.0 5194

11TH LARGEST	1478.0 5207	474.0 5214	1355.0 5270	742.0 5269	529.0 5141	1710.0 5142	1855.0 5270	1830.0 5155
12TH LARGEST	1478.0 5155	475.0 5198	1361.0 5136	747.0 5244	530.0 5185	1718.0 5048	1863.0 5094	1833.0 5270
13TH LARGEST	1483.0 5257	477.0 5085	1361.0 5137	749.0 5050	531.0 5050	1718.0 5104	1870.0 5156	1837.0 5232
14TH LARGEST	1493.0 5138	480.0 5048	1361.0 5232	752.0 5048	533.0 5259	1727.0 5095	1895.0 5269	1846.0 5048
15TH LARGEST	1493.0 5185	483.0 5094	1372.0 5048	753.0 5118	536.0 5243	1737.0 5267	1900.0 5232	1849.0 5067
16TH LARGEST	1501.0 5251	484.0 5269	1373.0 5257	753.0 5232	539.0 5270	1743.0 5384	1955.0 5244	1851.0 5138
17TH LARGEST	1514.0 5134	490.0 5244	1377.0 5067	757.0 5067	541.0 5067	1743.0 5257	1960.0 5111	1855.0 5187
18TH LARGEST	1519.0 5067	490.0 5114	1377.0 5085	761.0 5271	542.0 5236	1747.0 5085	2003.0 5085	1865.0 5244
19TH LARGEST	1522.0 5244	498.0 5083	1396.0 5244	762.0 5138	549.0 5267	1748.0 5187	2110.0 5083	1876.0 5257
20TH LARGEST	1527.0 5187	518.0 5222	1413.0 5267	789.0 5257	549.0 5244	1751.0 5083	2203.0 5222	1930.0 5267
THE MEAN VALUE	1372.76	447.22	1291.84	693.53	490.71	1611.99	1532.42	1740.88
STD. DEVIATION	72.74	22.48	45.55	36.39	26.87	67.07	216.74	64.36
COEFF. OF VARIATION	5.30	5.03	3.53	5.25	5.48	4.10	14.14	3.70
VETA ONE	.06	.15	.02	.27	.06	.20	.56	.04
VETA TWO	2.37	4.03	2.97	3.57	2.68	2.29	3.17	3.22
(N-23)-AVG EST	1372.28	447.51	1291.37	693.39	490.71	1610.17	1521.10	1740.64
(N-23)-S.D. EST	77.94	20.12	45.61	35.30	27.39	72.60	217.27	62.79
PCT DIFF/MEANS	1.	-1.	1.	-1.	-1.	3.	5.	0.
PCT DIFF/STD DVS	-7.	12.	-0.	3.	-2.	-8.	-0.	2.
SIZE OF SAMPLE	100	100	100	100	100	100	100	100

MEN'S ARMY SUB-SERIES WORK SPACE

A SUMMARY OF THE MATERIAL ALREADY PRESENTED EITHER ON THE PRECEDING PAGES OR ON THE PUNCHED RANGE CARDS

NO.	VARIABLE NAME	MEAN	STD DEV	V-I	V-II	V	DELM	DELS	N	---THE RANGE CARD VALUES---				CF1	CF2
										MINIMUM	MIN	MAX	AVG		
1	OVERHEAD REACH HT	2151.05	94.16	-0.9	3.16	4.42	-0.8	.7	106	1855.01862	52392.02151.0	20.00	15.00	.10000	.39370
2	FUNCTIONAL REACH	797.51	41.18	-0.17	2.87	5.22	-1.7	2.2	106	691.0	687.5	862.0	798.0	.10000	.39370
3	FUNCT REACH EXTEND	918.64	52.21	-0.27	2.74	5.72	3.5	-1.7	106	785.0	777.5	1345.0	919.0	.10000	.39370
4	OVERHEAD REACH SIT	1368.79	58.50	-0.04	3.82	4.32	.1	7.1	106	1189.01187	51538.01369.0	15.00	10.00	.10000	.39370
5	FUNCTIONAL LEG LN	1105.51	52.38	.11	2.65	4.42	2.1	-5.1	106	1052.01047	51316.01186.0	10.00	10.00	.10000	.39370
6	WEIGHT	1590.98	218.26	.59	3.17	13.72	5.6	-9	106	1075.01072	52263.01591.0	50.00	25.00	.10000	.39370
7	STATURE	1779.48	62.55	.36	3.26	3.52	.8	2.6	106	1612.01607	51964.01779.0	15.00	10.00	.10000	.39370
8	OVERHEAD REACH BRD	384.99	20.55	.09	2.83	5.32	.0	-5	106	336.0	335.5	441.0	385.8	.10000	.39370
9	BENT TORSO HEIGHT	1372.76	72.74	.09	2.37	5.32	.6	-6.7	106	1203.01197	51527.01373.0	15.00	10.00	.10000	.39370
10	BENT TORSO BREADTH	447.22	22.48	-.15	4.03	5.02	-1.5	11.7	106	378.0	377.5	510.0	447.0	.10000	.39370
11	KNEELING HEIGHT	1291.88	45.55	.02	2.97	3.52	1.1	-1	106	1172.01167	51413.01292.0	10.00	5.00	.10000	.39370
12	KNEELING LEG LENGT	693.58	36.39	-.27	3.57	5.22	-1.1	3.1	106	572.0	567.5	789.0	694.0	.10000	.39370
13	BENT KNEE HT SUPIN	490.57	26.87	-.06	2.68	5.52	-.5	-1.9	106	417.0	416.5	549.0	491.0	.10000	.39370
14	HORI LG KNEES BENT	1611.99	67.07	.20	2.29	4.22	2.5	-7.6	106	1486.01477	51751.01612.0	10.00	10.00	.10000	.39370
15	WEIGHT-NUDE	1532.42	216.74	.56	3.17	14.12	5.2	-2	106	1025.01022	52203.01532.0	50.00	25.00	.10000	.39370
16	STATURE-NUDE	1740.88	64.36	.04	3.22	3.72	.4	2.5	106	1562.01557	51930.01741.0	15.00	10.00	.10000	.39370

BEST AVAILABLE COPY

SECRET

SECRET

SECRET

SECRET

STATISTICS FOR VARIABLES 9 THROUGH 16

	9	10	11	12	13	14	15	16
	SUBNASALE TO WALL	LIP PROTR US-N-WALL	HENTON TO WALL	ECTOCANTH US-WALL	TRAGION T O WALL	BITRAGON BREAUTH	HEAD 4T/T RAGN-VLRT	ECTOCANTH US-VERTEX
	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE
	SBJCT	SBJCT	SBJCT	SBJCT	SBJCT	SBJCT	SBJCT	SBJCT
1ST SMALLEST	192.0 5194	188.0 5241	176.0 5241	158.0 5199	82.0 5199	121.0 5162	115.0 5226	89.0 5268
2ND SMALLEST	193.0 5241	190.0 5241	162.0 5194	158.0 5490	88.0 5186	123.0 5158	119.0 5200	95.0 5065
3RD SMALLEST	193.0 5220	191.0 5220	185.0 5220	160.0 5220	89.0 5194	124.0 5072	120.0 5185	97.0 5257
4TH SMALLEST	194.0 5201	194.0 5240	185.0 5140	162.0 5194	90.0 5200	125.0 5209	122.0 5202	97.0 5166
5TH SMALLEST	196.0 5220	195.0 5220	187.0 5186	163.0 5220	91.0 5145	125.0 5107	122.0 5057	97.0 5089
6TH SMALLEST	196.0 5199	195.0 5170	187.0 5135	163.0 5211	93.0 5225	125.0 5073	123.0 5271	98.0 5202
7TH SMALLEST	196.0 5170	195.0 5135	187.0 5105	163.0 5100	93.0 5208	125.0 5082	123.0 5257	99.0 5245
8TH SMALLEST	196.0 5130	196.0 5199	188.0 5207	163.0 5145	93.0 5201	126.0 5201	123.0 5245	99.0 5185
9TH SMALLEST	199.0 5140	196.0 5194	188.0 5130	164.0 5208	93.0 5182	126.0 5105	123.0 5147	99.0 5141
10TH SMALLEST	199.0 5145	197.0 5145	188.0 5111	164.0 5105	94.0 5192	127.0 5185	123.0 5089	99.0 5072

11TH LARGEST	219.0 5216	222.0 5231	218.0 5057	185.0 5005	113.0 5245	142.0 5232	143.0 5064	120.0 5208
12TH LARGEST	219.0 5277	223.0 5257	219.0 5231	186.0 5120	114.0 5130	143.0 5168	144.0 5208	121.0 5267
13TH LARGEST	220.0 5231	224.0 5126	220.0 5064	187.0 5191	114.0 5191	143.0 5224	145.0 5086	122.0 5066
14TH LARGEST	222.0 5126	225.0 5198	222.0 5126	187.0 5256	114.0 5269	143.0 5234	145.0 5243	123.0 5241
15TH LARGEST	223.0 5065	226.0 5216	222.0 5198	188.0 5258	115.0 5126	144.0 5249	145.0 5256	124.0 5088
16TH LARGEST	223.0 5080	226.0 5080	223.0 5080	188.0 5277	116.0 5256	145.0 5121	146.0 5168	124.0 5192
17TH LARGEST	223.0 5207	230.0 5065	225.0 5065	190.0 5269	117.0 5270	146.0 5233	146.0 5244	127.0 5240
18TH LARGEST	227.0 5270	235.0 5279	226.0 5279	190.0 5270	118.0 5065	147.0 5231	146.0 5270	128.0 5270
19TH LARGEST	230.0 5279	236.0 5279	230.0 5270	195.0 5161	119.0 5267	149.0 5065	151.0 5234	130.0 5234
20TH LARGEST	233.0 5081	239.0 5061	236.0 5081	195.0 5267	120.0 5061	149.0 5191	154.0 5232	133.0 5232
MEAN	208.60	209.09	202.16	175.02	103.23	135.05	135.88	110.38
STD. DEVIATION	7.83	10.00	11.13	7.40	7.13	5.88	6.79	7.94
COEFF. OF VARIATION	3.75	4.78	5.50	4.27	6.91	4.36	5.07	7.19
VETA ONE	.36	.51	.45	.12	-.05	-.04	.03	.22
VETA TWO	3.47	3.29	3.09	3.12	3.09	2.03	3.47	3.14
(N-20)-AVG EST	208.44	208.56	201.54	174.91	103.21	135.09	135.88	110.22
(N-20)-S.D. EST	7.22	9.79	11.13	7.00	6.99	6.09	6.11	7.70
PCT DIFF/MEANS	3.	5.	6.	2.	1.	-1.	0.	2.
PCT DIFF/STD DVS	8.	2.	-0.	7.	2.	-3.	11.	3.
SIZE OF SAMPLE	102	102	102	102	102	102	102	102

MEN'S ARMY SUB-SERIES HEAD AND FACE

STATISTICS FOR VARIABLES 17 THROUGH 24

	17	18	19	20	21	22	23	24
	GLABELLA	SECTION T	PROMASALE	SUBNASALE	STOMION T	MENTION TO	FACE LENG	CRINION-M
	TO VERTEX	U VERTEX	TO VERTE	TO VERTE	U VERTEX	VERTEX	TH	ENTON
	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE
1ST SMALLEST	59.0 5202	70.0 5260	109.0 5198	122.0 5198	144.0 5190	193.0 5198	112.0 5271	169.0 5271
2ND SMALLEST	64.0 5208	79.0 5213	112.0 5208	125.0 5268	140.0 5208	193.0 5208	104.0 5226	166.0 5224
3RD SMALLEST	64.0 5198	80.0 5279	112.0 5009	126.0 5065	150.0 5009	198.0 5182	114.0 5170	167.0 5227
4TH SMALLEST	64.0 5100	81.0 5072	115.0 5259	129.0 5089	152.0 5282	199.0 5271	104.0 5100	168.0 5163
5TH SMALLEST	69.0 5240	81.0 5057	115.0 5126	130.0 5162	152.0 5009	199.0 5166	104.0 5100	169.0 5162
6TH SMALLEST	69.0 5191	82.0 5245	117.0 5141	131.0 5282	154.0 5109	199.0 5065	104.0 5100	171.0 5304
7TH SMALLEST	60.0 5182	82.0 5166	117.0 5072	133.0 5141	154.0 5072	200.0 5282	100.0 5224	171.0 5109
8TH SMALLEST	60.0 5259	82.0 5069	118.0 5215	133.0 5160	155.0 5080	200.0 5104	107.0 5231	172.0 5182
9TH SMALLEST	67.0 5205	82.0 5089	118.0 5185	133.0 5094	155.0 5090	200.0 5060	107.0 5094	174.0 5207
10TH SMALLEST	60.0 5037	83.0 5257	119.0 5182	133.0 5037	157.0 5166	201.0 5109	109.0 5125	174.0 5170
11TH LARGEST	92.0 5004	110.0 5232	147.0 5000	158.0 5073	184.0 5073	220.0 5000	127.0 5094	195.0 5233
12TH LARGEST	92.0 5008	111.0 5148	147.0 5170	159.0 5008	184.0 5241	229.0 5008	126.0 5072	196.0 5277
13TH LARGEST	92.0 5109	112.0 5084	148.0 5121	159.0 5251	184.0 5251	230.0 5148	126.0 5200	197.0 5200
14TH LARGEST	93.0 5241	112.0 5214	148.0 5267	159.0 5267	185.0 5008	230.0 5207	126.0 5252	197.0 5258
15TH LARGEST	93.0 5270	113.0 5250	151.0 5232	160.0 5241	189.0 5148	230.0 5270	129.0 5072	198.0 5251
16TH LARGEST	94.0 5148	114.0 5083	151.0 5241	163.0 5148	189.0 5192	234.0 5073	129.0 5277	198.0 5279
17TH LARGEST	94.0 5192	115.0 5192	153.0 5148	163.0 5234	189.0 5234	234.0 5251	130.0 5219	203.0 5243
18TH LARGEST	94.0 5232	117.0 5234	154.0 5192	164.0 5192	189.0 5207	239.0 5192	130.0 5251	204.0 5081
19TH LARGEST	97.0 5234	118.0 5241	156.0 5234	164.0 5232	190.0 5232	238.0 5241	131.0 5210	206.0 5257
20TH LARGEST	90.0 5240	120.0 5240	163.0 5240	172.0 5240	194.0 5240	240.0 5232	132.0 5240	207.0 5232
THE MEAN VALUE	79.13	90.50	101.44	144.85	108.05	213.30	117.04	105.24
STD. DEVIATION	8.55	9.98	11.00	9.54	9.48	10.30	5.75	8.50
COEFF. OF VARIATION	10.82	10.34	8.11	6.59	8.92	4.69	5.77	4.59
WETA ONE	.00	.24	.43	.22	.23	.30	.07	.04
WETA TWO	2.31	2.25	2.85	2.74	2.75	2.80	2.34	3.00
(N-20)-AVG EST	78.94	90.40	101.94	144.80	108.35	212.80	117.00	105.32
(N-20)-S.D. EST	9.28	10.72	11.05	10.07	10.00	10.12	6.03	8.23
PCT DIFF/MEANS	1.0	3.0	5.0	5.0	3.0	5.0	1.0	-1.0
PCT DIFF/STD D/S	-8.0	-7.0	-3.0	-5.0	-1.0	-1.0	-1.0	3.0
SIZE OF SAMPLE	102	102	102	102	102	102	102	102

MENT'S ARMY SUB-SERIES HEAD AND FACE

DEST AM 1000 - 0000

MCEN'S ARMY SUB-SERIES HEAD AND FACE

TEST AVAILABLE COPY

STATISTICS FOR VARIABLES 33 THROUGH 37

	33	34	35	36	37
	EAR BREAD	BIAURICUL	HEAD CIRC	HEAD BREA	HEAD BREA
	TH	AK BK	UMFERENCE	OTH	TH
	VALUE	VALUE	VALUE	VALUE	VALUE
	SBJCT	SBJCT	SBJCT	SBJCT	SBJCT
1ST SMALLEST	34.0 5258	157.0 5215	522.0 5194	139.0 5252	170.0 5194
2ND SMALLEST	35.0 5185	160.0 5271	525.0 5220	140.0 5236	181.0 5220
3RD SMALLEST	36.0 5215	162.0 5209	527.0 5220	141.0 5281	181.0 5220
4TH SMALLEST	37.0 5200	163.0 5258	530.0 5241	141.0 5271	181.0 5185
5TH SMALLEST	37.0 5208	165.0 5194	531.0 5256	141.0 5245	183.0 5288
6TH SMALLEST	37.0 5089	165.0 5158	532.0 5163	141.0 5163	183.0 5098
7TH SMALLEST	37.0 5135	166.0 5278	533.0 5201	141.0 5162	184.0 5201
8TH SMALLEST	38.0 5243	166.0 5165	533.0 5185	141.0 5105	180.0 5199
9TH SMALLEST	38.0 5201	167.0 5061	540.0 5271	142.0 5226	187.0 5280
10TH SMALLEST	39.0 5227	167.0 5105	540.0 5082	142.0 5147	188.0 5235

11TH LARGEST	48.0 5141	190.0 5168	580.0 5231	156.0 5156	204.0 5232
12TH LARGEST	48.0 5164	190.0 5208	582.0 5269	156.0 5159	204.0 5269
13TH LARGEST	49.0 5140	190.0 5250	582.0 5277	157.0 5100	206.0 5234
14TH LARGEST	51.0 5000	191.0 5138	583.0 5126	157.0 5120	206.0 5270
15TH LARGEST	51.0 5111	192.0 5269	585.0 5232	157.0 5145	207.0 5004
16TH LARGEST	51.0 5148	190.0 5244	585.0 5244	157.0 5153	208.0 5231
17TH LARGEST	51.0 5192	197.0 5159	588.0 5081	157.0 5201	208.0 5277
18TH LARGEST	51.0 5245	199.0 5234	589.0 5270	157.0 5251	209.0 5258
19TH LARGEST	52.0 5090	200.0 5109	595.0 5267	150.0 5168	210.0 5250
20TH LARGEST	53.0 5187	211.0 5090	601.0 5256	159.0 5259	213.0 5267
THL MEAN VALUE	43.30	178.73	558.75	149.74	194.82
STU. DEVIATION	3.63	8.71	15.54	4.87	6.54
COFF/VARIATION	6.37	4.88	2.78	3.25	3.36
VEA ONE	.21	.18	.11	-.25	.18
VEA TWO	3.40	2.98	2.94	2.20	3.03
(N-20)-AVG EST	43.32	178.01	556.05	149.91	194.72
(N-20)-S.D. EST	3.14	8.61	15.14	5.43	5.06
PCT DIFF/MEANS	2.	1.	1.	-3.	2.
PCT DIF/ST DVS	16.	1.	3.	-10.	15.
SIZE OF SAMPLE	102	102	102	102	102

MEN'S ARMY SUB-SERIES HEAD AND FACE

A SUMMARY OF THE MATERIAL ALREADY PRESENTED EITHER ON THE PRECEDING PAGES OR ON THE PUNCHED RANGE CARDS

NO.	VARIABLE NAME	MEAN	STD DEV	V-I	V-II	V	D-LM	DELS	N	MINIMUM	MIN	MAX	AVG	---THE RANGE CARD VALUES---			CF1	CF2
														INTV1	INTV2			
1	SAGITTAL ARC	346.03	14.99	.12	3.74	4.32	3.0	7.8	102	300.0	299.5	308.5	304.0	3.00	2.00		10000	.99370
2	BIT/ON-CURVATL ARC	341.14	12.65	-.14	2.62	3.72	-1.3	-3.2	102	310.0	309.5	372.0	341.0	3.00	2.00		10000	.99370
3	BIT/ON-FRONTAL ARC	293.13	10.71	-.03	2.74	3.72	.4	-7.7	102	265.0	263.5	317.0	293.0	2.00	2.00		10000	.99370
4	BIT/ON-FENTON ARC	310.98	12.99	-.02	2.39	4.22	-6.8	-7.7	102	265.0	281.5	342.0	311.0	3.00	2.00		10000	.99370
5	BIT-SUBMANDBLK ARC	286.25	12.84	.04	2.20	4.52	.8	-11.0	102	255.0	257.5	318.0	286.0	3.00	2.00		10000	.99370
6	GLABELLA TO WALL	196.08	7.15	.37	3.42	3.62	3.3	12.3	102	179.0	178.5	217.0	196.0	2.00	1.00		10000	.99370
7	SELLION TO WALL	194.86	7.35	.32	3.75	3.62	2.9	14.5	102	177.0	175.5	216.0	195.0	2.00	1.00		10000	.99370
8	PROMASALE TO WALL	222.00	7.49	.07	3.08	3.42	.5	-4	102	241.0	240.5	243.0	242.0	2.00	1.00		10000	.99370
9	SUBNASALE TO WALL	208.68	7.83	.38	3.47	3.82	3.3	8.4	102	192.0	191.5	233.0	219.0	2.00	1.00		10000	.99370
10	LIP PROTUSUS-M-WALL	209.69	10.00	.51	3.29	4.82	5.4	2.1	102	180.0	187.5	239.0	209.0	3.00	2.00		10000	.99370
11	MENTON TO WALL	202.16	11.13	.42	3.09	5.12	2.6	-0	102	176.0	175.5	236.0	202.0	3.00	2.00		10000	.99370
12	ECTOCANTHUS-WALL	175.02	7.46	.12	3.12	4.32	1.5	6.7	102	158.0	157.5	195.0	175.0	2.00	1.00		10000	.99370
13	TRAGION TO WALL	133.23	7.13	-.05	3.19	4.92	.3	2.0	102	82.0	81.5	120.0	103.0	2.00	1.00		10000	.99370
14	BITRAGION BREADTH	135.05	5.86	-.04	2.63	4.42	-6.6	-3.5	102	121.0	120.5	149.0	134.0	1.00	1.00		10000	.99370
15	HEAD HYPTRAGN-VERTE	133.08	9.79	.03	3.47	5.12	.1	11.2	102	115.0	114.5	154.0	134.0	2.00	1.00		10000	.99370
16	ECTOCANTHUS-VERTE	110.38	7.94	.22	3.14	7.22	2.1	3.2	102	89.0	88.5	133.0	110.0	2.00	1.00		10000	.99370
17	GLABELLA TO VERTEX	79.03	8.55	.00	2.30	10.82	1.0	-7.8	102	59.0	58.5	98.0	79.0	2.00	1.00		10000	.99370
18	SELLION TO VERTEX	96.56	9.98	.24	2.53	10.32	2.0	-6.9	102	78.0	77.5	125.0	97.0	2.00	1.00		10000	.99370
19	PROMASALE TO VERTE	131.44	10.66	.43	2.65	8.12	4.5	-3.5	102	109.0	107.5	163.0	131.0	2.00	2.00		10000	.99370
20	SUBNASALE TO VERTE	144.89	9.54	.22	2.74	9.62	2.5	-5.3	102	122.0	121.5	172.0	145.0	2.00	2.00		10000	.99370
21	STOMION TO VERTEX	168.05	9.98	.23	2.75	5.92	2.9	-8	102	144.0	143.5	194.0	169.0	2.00	2.00		10000	.99370
22	MENTON TO VERTEX	213.30	10.00	.36	2.80	4.72	4.8	-1.2	102	190.0	189.5	246.0	213.0	2.00	2.00		10000	.99370
23	FACE LENGTH	117.04	6.75	.07	2.54	2.82	.6	-1.2	102	102.0	101.5	132.0	117.0	2.00	1.00		10000	.99370
24	CRION-MENTON	105.24	8.50	-.04	3.00	4.62	-1.0	3.4	102	165.0	164.5	207.0	185.0	2.00	1.00		10000	.99370
25	MINIMUM FRONTAL BR	111.29	8.04	-.15	2.19	7.22	-1.7	-11.0	102	92.0	91.5	127.0	111.0	2.00	1.00		10000	.99370
26	FACE P/IZYGOMATIC	137.59	5.24	-.38	2.70	3.82	-4.9	-2.1	102	125.0	124.5	148.0	138.0	1.00	1.00		10000	.99370
27	BIOCULAR BREADTH	101.10	4.94	-.18	3.25	4.92	-3.1	8.9	102	87.0	86.5	114.0	101.0	1.00	1.00		10000	.99370
28	ANTEROPILLARY DIS	58.92	4.81	.05	3.17	8.22	.4	-6	102	47.0	46.5	73.0	59.0	1.00	1.00		10000	.99370
29	NOSE LENGTH	49.74	3.59	.51	2.50	7.22	3.3	-5.2	102	42.0	41.5	58.0	50.0	1.00	1.00		10000	.99370
30	MOUSE BREADTH	37.24	4.75	.30	2.42	12.82	3.8	-11.2	102	28.0	27.5	48.0	37.0	1.00	1.00		10000	.99370
31	MOUSE BIRTH/SHILING	64.71	7.17	.23	2.34	11.12	2.5	-9.2	102	51.0	50.5	81.0	65.0	2.00	1.00		10000	.99370
32	EAR LENGTH	62.19	4.41	-.27	3.53	7.12	-1.8	12.8	102	49.0	48.5	72.0	62.0	1.00	1.00		10000	.99370
33	EAR BREADTH	43.38	3.63	.21	3.45	8.42	2.1	19.7	102	34.0	33.5	53.0	43.0	1.00	1.00		10000	.99370
34	BIURICULAR BR	176.73	8.71	.18	2.98	4.92	1.3	1.2	102	157.0	156.5	201.0	179.0	2.00	1.00		10000	.99370
35	HEAD CIRCUMFERENCE	526.75	15.54	.11	2.94	2.82	.7	2.0	102	522.0	521.5	601.0	559.0	3.00	2.00		10000	.99370
36	HEAD BREADTH	149.74	4.87	-.22	2.20	3.32	-3.3	-10.3	102	139.0	138.5	159.0	150.0	1.00	1.00		10000	.99370
37	HEAD BREADTH	194.82	6.54	.10	3.63	3.42	1.8	12.5	102	176.0	175.5	213.0	195.0	2.00	1.00		10000	.99370

BEST AVAILABLE COPY

C-4. XVAL TABLES FOR THE STATIC STRENGTH SUBSERIES

STATISTICS FOR VARIABLES 1 THROUGH 8

	1	2	3	4	5	6	7	8
	STRNGTH/2 H 38CM M1	STRNGTH/2 H 38CM M2	STRNGTH/2 H 38CM P1	STRNGTH/2 H 38CM P2	STRNGTH/2 H 50CM M1	STRNGTH/2 H 50CM M2	STRNGTH/2 H 50CM P1	STRNGTH/2 H 50CM P2
	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE
1ST SMALLEST	1433.0	1483.0	1566.0	1660.0	1491.0	1569.0	1562.0	1733.0
2ND SMALLEST	1463.0	1528.0	1579.0	1746.0	1535.0	1602.0	1683.0	1777.0
3RD SMALLEST	1471.0	1585.0	1628.0	1758.0	1553.0	1619.0	1720.0	1794.0
4TH SMALLEST	1525.0	1599.0	1672.0	1820.0	1592.0	1658.0	1738.0	1836.0
5TH SMALLEST	1530.0	1601.0	1720.0	1906.0	1615.0	1663.0	1762.0	1843.0
6TH SMALLEST	1585.0	1619.0	1779.0	1920.0	1627.0	1686.0	1770.0	1867.0
7TH SMALLEST	1594.0	1634.0	1800.0	1950.0	1632.0	1723.0	1811.0	1899.0
8TH SMALLEST	1595.0	1647.0	1824.0	1964.0	1650.0	1735.0	1907.0	1902.0
9TH SMALLEST	1635.0	1695.0	1845.0	1970.0	1698.0	1746.0	1910.0	1905.0
10TH SMALLEST	1637.0	1707.0	1887.0	1980.0	1701.0	1763.0	1926.0	1945.0

11TH LARGEST	2908.0	2902.0	3065.0	3043.0	2803.0	2797.0	3042.0	3145.0
12TH LARGEST	2922.0	2975.0	3129.0	3102.0	2860.0	2875.0	3072.0	3146.0
13TH LARGEST	2961.0	2996.0	3186.0	3116.0	2920.0	2881.0	3239.0	3163.0
14TH LARGEST	3031.0	3008.0	3192.0	3150.0	2978.0	3033.0	3270.0	3170.0
15TH LARGEST	3032.0	3009.0	3269.0	3267.0	3028.0	3052.0	3274.0	3227.0
16TH LARGEST	3073.0	3110.0	3270.0	3333.0	3063.0	3069.0	3398.0	3324.0
17TH LARGEST	3093.0	3200.0	3280.0	3405.0	3092.0	3169.0	3406.0	3330.0
18TH LARGEST	3150.0	3240.0	3294.0	3421.0	3190.0	3252.0	3403.0	3351.0
19TH LARGEST	3280.0	3243.0	3463.0	3456.0	3227.0	3287.0	3443.0	3513.0
20TH LARGEST	3455.0	3443.0	3565.0	3589.0	3234.0	3389.0	3603.0	3664.0
THE MEAN VALUE								
	2264.92	2290.27	2451.81	2510.32	2250.93	2274.25	2472.02	2485.49
STD. DEVIATION								
	454.14	420.11	459.20	399.98	401.14	398.18	430.48	411.47
COEFF. OF VARIATION								
	20.05	18.34	18.73	15.93	17.82	17.51	17.41	16.55
VECTA ONE								
	.21	.36	.21	.33	.35	.55	.37	.48
VECTA TWO								
	2.41	2.82	2.30	2.94	2.76	3.04	2.84	2.90
(N-20)-AVG EST								
	2251.82	2271.84	2441.15	2493.84	2232.90	2248.85	2453.82	2463.61
(N-20)-S.D. EST								
	488.24	414.49	501.55	394.07	398.17	393.05	423.94	409.75
PCT DIFF/MEANS								
	3.	4.	2.	4.	5.	6.	4.	5.
PCT DIF/ST DVS								
	-7.	1.	-8.	1.	1.	1.	2.	0.
SIZE OF SAMPLE								
	102	102	102	102	102	102	102	102

MEN'S ARMY SUB-SERIES STATIC MUSCLE STRENGTH

9

	9			10			11			12			13			14			15			16
	STRGTH/2H		100CM M1	STRGTH/2H		100CM M2	STRGTH/2H		100CM P1	STRGTH/2H		100CM P2	STRGTH/2H		150CM M1	STRGTH/2H		150CM M2	STRGTH/2H		150CM P1	STRGTH/2H
	VALUE	SBJCT	VALUE	SBJCT	VALUE	SBJCT	VALUE	SBJCT	VALUE	SBJCT	VALUE	SBJCT	VALUE	SBJCT	VALUE	SBJCT	VALUE	SBJCT	VALUE	SBJCT	VALUE	SBJCT
1ST SMALLEST	876.0	5101	830.0	5204	945.0	5101	904.0	5101	820.0	5101	820.0	5101	792.0	5101	919.0	5011	903.0	5101	903.0	5101	903.0	5101
2ND SMALLEST	879.0	5183	838.0	5183	1034.0	5041	938.0	5204	829.0	5167	829.0	5167	792.0	5011	946.0	5167	906.0	5011	906.0	5011	906.0	5011
3RD SMALLEST	979.0	5041	843.0	5161	1089.0	5104	990.0	5183	842.0	5011	842.0	5011	835.0	5093	960.0	5101	962.0	5093	962.0	5093	962.0	5093
4TH SMALLEST	986.0	5092	924.0	5195	1103.0	5183	1042.0	5195	871.0	5254	871.0	5254	904.0	5104	1000.0	5104	1020.0	5104	1020.0	5104	1020.0	5104
5TH SMALLEST	993.0	5104	966.0	5104	1124.0	5254	1059.0	5011	874.0	5253	874.0	5253	906.0	5189	1049.0	5189	1040.0	5189	1040.0	5189	1040.0	5189
6TH SMALLEST	1004.0	5195	988.0	5011	1131.0	5011	1072.0	5104	899.0	5183	899.0	5183	928.0	5253	1055.0	5183	1047.0	5183	1047.0	5183	1047.0	5183
7TH SMALLEST	1008.0	5128	989.0	5189	1178.0	5189	1123.0	5189	909.0	5104	909.0	5104	930.0	5183	1092.0	5100	1088.0	5253	1088.0	5253	1088.0	5253
8TH SMALLEST	1020.0	5189	1060.0	5035	1178.0	5128	1135.0	5035	941.0	5100	941.0	5100	946.0	5189	1097.0	5189	1114.0	5238	1114.0	5238	1114.0	5238
9TH SMALLEST	1042.0	5254	1066.0	5260	1184.0	5167	1168.0	5260	1013.0	5093	1013.0	5093	988.0	5100	1118.0	5100	1141.0	5100	1141.0	5100	1141.0	5100
XTH SMALLEST	1043.0	5126	1087.0	5128	1198.0	5204	1191.0	5145	1023.0	5180	1023.0	5180	1010.0	5033	1163.0	5254	1142.0	5183	1142.0	5183	1142.0	5183

XTH LARGEST	1959.0	5152	1957.0	5239	2107.0	5239	2103.0	5132	2039.0	5275	2039.0	5275	2080.0	5151	2211.0	5239	2287.0	5131	2287.0	5131	2287.0	5131
9TH LARGEST	1981.0	5132	1963.0	5124	2124.0	5197	2116.0	5197	2045.0	5237	2045.0	5237	2132.0	5266	2228.0	5124	2341.0	5124	2341.0	5124	2341.0	5124
8TH LARGEST	1994.0	5124	1981.0	5152	2128.0	5122	2128.0	5265	2151.0	5124	2151.0	5124	2182.0	5265	2244.0	5131	2346.0	5265	2346.0	5265	2346.0	5265
7TH LARGEST	2018.0	5239	2005.0	5132	2167.0	5131	2137.0	5122	2198.0	5266	2198.0	5266	2223.0	5124	2296.0	5130	2364.0	5266	2364.0	5266	2364.0	5266
6TH LARGEST	2077.0	5122	2019.0	5265	2198.0	5060	2146.0	5152	2199.0	5130	2199.0	5130	2247.0	5246	2338.0	5265	2452.0	5246	2452.0	5246	2452.0	5246
5TH LARGEST	2099.0	5060	2062.0	5122	2222.0	5237	2150.0	5151	2214.0	5265	2214.0	5265	2345.0	5218	2558.0	5246	2541.0	5139	2541.0	5139	2541.0	5139
4TH LARGEST	2112.0	5265	2131.0	5060	2230.0	5265	2295.0	5060	2330.0	5218	2330.0	5218	2365.0	5139	2590.0	5266	2565.0	5122	2565.0	5122	2565.0	5122
3RD LARGEST	2122.0	5237	2175.0	5237	2235.0	5152	2389.0	5237	2334.0	5122	2334.0	5122	2407.0	5122	2594.0	5218	2697.0	5218	2697.0	5218	2697.0	5218
2ND LARGEST	2144.0	5246	2355.0	5246	2308.0	5246	2498.0	5246	2498.0	5246	2498.0	5246	2622.0	5130	2614.0	5122	2775.0	5130	2775.0	5130	2775.0	5130
1ST LARGEST	2485.0	5051	2480.0	5051	2588.0	5051	2596.0	5051	2596.0	5051	2596.0	5051	3266.0	5264	3187.0	5264	3642.0	5264	3642.0	5264	3642.0	5264
THE MEAN VALUE	1467.58		1454.20		1596.03		1594.98		1596.03		1594.98		1515.65		1642.60		1672.86		1672.86		1642.60	
STD. DEVIATION	323.61		329.72		330.51		350.95		330.51		350.95		437.27		421.91		452.82		452.82		421.91	
COFF/VARIATION	22.05		22.67		20.71		22.00		20.71		22.00		28.85		25.69		27.07		27.07		25.69	
VETA ONE	.55		.57		.51		.47		.51		.47		.87		.76		1.06		1.06		.76	
VETA TWO	2.91		3.21		2.68		2.80		2.68		2.80		4.32		3.75		5.33		5.33		3.75	
(N-20)-AVG EST	1449.66		1434.26		1577.12		1579.37		1577.12		1579.37		1484.10		1613.24		1637.30		1637.30		1613.24	
(N-20)-S.D.EST	333.67		325.95		352.27		367.88		352.27		367.88		435.25		420.55		425.32		425.32		420.55	
PCT DIFF/MEANS	5.		6.		5.		4.		5.		4.		7.		7.		8.		8.		7.	
PCT DIFF/STD DVS	-3.		1.		-6.		-5.		-6.		-5.		0.		0.		6.		6.		0.	
SIZE OF SAMPLE	102		102		102		102		102		102		102		102		102		102		102	

MEN'S ARMY SUB-SERIES STATIC MUSCLE STRENGTH

1500
1500
1500

STATISTICS FOR VARIABLES 17 THROUGH 24

207

	17	18	19	20	21	22	23	24
	STRGTH/1H	STRGTH/1H	STRGTH/1H	STRGTH/1H	STRGTH/1H	STRGTH/1H	STRGTH/1H	STRGTH/1H
	100CM M1	100CM M2	100CM P1	100CM P2	H 45 C M1	H 45 C M2	H 45 C P1	H 45 C P2
	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE
1ST SMALLEST	422.0	395.0	447.0	452.0	344.0	414.0	499.0	482.0
2ND SMALLEST	423.0	402.0	489.0	457.0	422.0	442.0	501.0	559.0
3RD SMALLEST	461.0	434.0	517.0	507.0	446.0	489.0	511.0	572.0
4TH SMALLEST	466.0	462.0	533.0	523.0	452.0	499.0	528.0	573.0
5TH SMALLEST	467.0	476.0	550.0	554.0	457.0	503.0	569.0	602.0
6TH SMALLEST	489.0	477.0	567.0	561.0	471.0	522.0	600.0	614.0
7TH SMALLEST	505.0	518.0	584.0	568.0	510.0	542.0	612.0	651.0
8TH SMALLEST	509.0	523.0	585.0	572.0	552.0	555.0	613.0	662.0
9TH SMALLEST	520.0	530.0	600.0	579.0	564.0	556.0	625.0	670.0
10TH SMALLEST	529.0	532.0	610.0	585.0	594.0	581.0	662.0	685.0
11TH LARGEST	1312.0	1263.0	1497.0	1496.0	1412.0	1463.0	1594.0	1610.0
12TH LARGEST	1342.0	1285.0	1549.0	1510.0	1427.0	1467.0	1617.0	1649.0
13TH LARGEST	1381.0	1341.0	1669.0	1517.0	1429.0	1480.0	1619.0	1658.0
14TH LARGEST	1384.0	1422.0	1733.0	1532.0	1432.0	1491.0	1622.0	1675.0
15TH LARGEST	1385.0	1450.0	1778.0	1601.0	1452.0	1498.0	1641.0	1697.0
16TH LARGEST	1612.0	1520.0	1778.0	1721.0	1498.0	1542.0	1659.0	1717.0
17TH LARGEST	1629.0	1524.0	1786.0	1772.0	1546.0	1547.0	1666.0	1725.0
18TH LARGEST	1673.0	1552.0	1789.0	1782.0	1580.0	1548.0	1707.0	1774.0
19TH LARGEST	1710.0	1644.0	1863.0	1893.0	1613.0	1585.0	1749.0	1784.0
20TH LARGEST	1750.0	1749.0	2187.0	2186.0	1621.0	1669.0	1750.0	1814.0
THE MEAN VALUE	917.40	933.25	1048.74	1077.09	1000.89	1048.91	1148.72	1172.54
STD. DEVIATION	288.82	282.10	327.70	317.41	307.54	313.87	330.57	334.10
COEFF/VARIATION	31.48	30.23	31.25	29.47	30.73	29.92	28.83	28.49
VETA ONE	.65	.34	.77	.47	-.09	-.21	-.23	-.14
VETA TWO	3.49	3.01	3.99	3.85	2.19	2.07	2.14	2.11
(N-20)-AVG EST	897.63	923.49	1022.71	1067.01	1003.28	1056.10	1153.91	1175.93
(N-20)-S.D. EST	269.99	276.67	283.75	285.44	343.71	360.70	373.65	377.26
PCT DIFF/MEANS	7.	4.	9.	4.	-1.	-2.	-2.	-1.
PCT DIF/ST DVS	7.	2.	15.	11.	-11.	-13.	-12.	-11.
SIZE OF SAMPLE	102	102	102	102	102	102	102	102

MEN'S ARMY SUB-SERIES STATIC MUSCLE STRENGTH

STATISTICS FOR VARIABLES 25 THROUGH 32

	25	26	27	28	29	30	31	32
	STRNGTH/1	STRNGTH/1	STRNGTH/1	STRNGTH/1	STRNGTH/2	STRNGTH/2	STRNGTH/2	STRNGTH/2
	H 45 S M1	H 45 S M2	H 45 S P1	H 45 S P2	H 38CM M1	H 38CM M2	H 38CM P1	H 38CM P2
1ST SMALLEST	432.0 5189	462.0 5011	502.0 5183	525.0 5245	1022.0 5104	1057.0 5167	1229.0 5167	1206.0 5167
2ND SMALLEST	436.0 5183	490.0 5205	509.0 5117	578.0 5117	1118.0 5011	1091.0 5104	1241.0 5104	1322.0 5104
3RD SMALLEST	443.0 5146	529.0 5117	513.0 5189	582.0 5011	1139.0 5167	1167.0 5126	1320.0 5011	1330.0 5126
4TH SMALLEST	443.0 5117	531.0 5137	525.0 5253	605.0 5189	1291.0 5128	1301.0 5205	1418.0 5128	1549.0 5238
5TH SMALLEST	444.0 5127	533.0 5183	533.0 5127	606.0 5137	1329.0 5145	1351.0 5238	1461.0 5128	1583.0 5205
6TH SMALLEST	467.0 5253	538.0 5018	549.0 5205	619.0 5152	1350.0 5115	1382.0 5011	1483.0 5188	1627.0 5035
7TH SMALLEST	478.0 5019	539.0 5152	556.0 5139	623.0 5018	1367.0 5172	1426.0 5189	1536.0 5146	1640.0 5172
8TH SMALLEST	480.0 5113	555.0 5189	560.0 5019	680.0 5041	1388.0 5126	1430.0 5137	1611.0 5189	1648.0 5011
9TH SMALLEST	485.0 5139	603.0 5019	578.0 5113	697.0 5127	1378.0 5189	1453.0 5172	1613.0 5183	1670.0 5188
10TH SMALLEST	491.0 5205	607.0 5041	584.0 5140	715.0 5139	1382.0 5188	1494.0 5183	1619.0 5145	1675.0 5017

XTH LARGEST	1231.0 5237	1320.0 5217	1373.0 5217	1420.0 5181	2651.0 5181	2604.0 5060	2700.0 5181	2786.0 5152
9TH LARGEST	1253.0 5239	1336.0 5124	1374.0 5047	1420.0 5237	2664.0 5218	2615.0 5051	2813.0 5208	2817.0 5124
8TH LARGEST	1257.0 5175	1336.0 5228	1410.0 5265	1427.0 5124	2693.0 5124	2627.0 5124	2829.0 5152	2827.0 5051
7TH LARGEST	1259.0 5211	1336.0 5239	1443.0 5175	1465.0 5122	2706.0 5051	2628.0 5152	2850.0 5113	2830.0 5060
6TH LARGEST	1260.0 5217	1348.0 5237	1454.0 5239	1488.0 5239	2740.0 5113	2660.0 5261	3023.0 5139	2915.0 5208
5TH LARGEST	1308.0 5205	1356.0 5100	1486.0 5275	1490.0 5175	2740.0 5139	2678.0 5264	3036.0 5218	2919.0 5212
4TH LARGEST	1349.0 5275	1357.0 5265	1499.0 5124	1507.0 5217	2765.0 5264	2681.0 5208	3135.0 5060	2978.0 5122
3RD LARGEST	1438.0 5124	1378.0 5099	1625.0 5218	1570.0 5218	2872.0 5060	2763.0 5122	3143.0 5264	3046.0 5264
2ND LARGEST	1500.0 5099	1414.0 5175	1645.0 5099	1571.0 5099	3035.0 5122	2938.0 5218	3370.0 5099	3380.0 5099
1ST LARGEST	1601.0 5264	1700.0 5264	1841.0 5264	1955.0 5264	3163.0 5099	3246.0 5099	3440.0 5122	3373.0 5218
THE MEAN VALUE	867.17	931.85	998.62	1055.84	1977.71	1994.39	2165.38	2204.35
STD. DEVIATION	263.05	252.12	289.10	269.25	442.47	406.18	447.63	406.07
COEFF/VARIATION	30.33	27.06	28.96	25.50	22.37	20.37	20.67	18.51
VETA ONE	.28	.32	.24	.31	.31	.19	.47	.31
VETA TWO	2.56	2.60	2.61	2.96	2.69	3.06	3.14	3.12
(N-20) - AVG EST	858.49	924.16	991.46	1050.89	1962.84	1985.80	2145.60	2191.91
(N-20) - S.D. EST	283.88	272.28	311.49	286.82	460.51	404.44	435.38	399.81
PCT DIFF/MEANS	3.	3.	2.	2.	3.	2.	5.	3.
PCT DIF/ST DVS	-7.	-7.	-7.	-6.	-4.	0.	3.	2.
SIZE OF SAMPLE	102	102	102	102	102	102	102	102

BEST AVAILABLE COPY

STATISTICS FOR VARIABLES 33 THROUGH 38

	33	34	35	36	37	38
	STRNGTH/2 H 50CM M1	STRNGTH/2 H 50CM M2	STRNGTH/2 H 50CM P1	STRNGTH/2 H 50CM P2	WEIGHT	STATURE
	VALUE	VALUE	VALUE	VALUE	VALUE	VALUE
1ST SMALLEST	816.0 5167	935.0 5164	899.0 5167	1175.0 5146	850.0 5275	1588.0 5180
2ND SMALLEST	959.0 5183	1041.0 5167	1120.0 5145	1200.0 5167	1200.0 5230	1591.0 5230
3RD SMALLEST	980.0 5145	1076.0 5146	1156.0 5183	1201.0 5145	1220.0 5183	1593.0 5011
4TH SMALLEST	983.0 5011	1100.0 5145	1166.0 5146	1237.0 5104	1220.0 5180	1598.0 5101
5TH SMALLEST	996.0 5104	1121.0 5183	1191.0 5011	1288.0 5011	1225.0 5104	1607.0 5274
6TH SMALLEST	1021.0 5146	1126.0 5011	1234.0 5104	1305.0 5163	1233.0 5101	1620.0 5189
7TH SMALLEST	1122.0 5128	1215.0 5215	1241.0 5017	1348.0 5017	1250.0 5172	1627.0 5041
8TH SMALLEST	1194.0 5092	1232.0 5130	1352.0 5092	1375.0 5130	1270.0 5195	1642.0 5099
9TH SMALLEST	1201.0 5017	1250.0 5189	1353.0 5027	1377.0 5189	1278.0 5011	1651.0 5100
XTH SMALLEST	1217.0 5027	1258.0 5128	1402.0 5253	1420.0 5205	1288.0 5137	1656.0 5091

9TH LARGEST	2114.0 5045	2218.0 5160	2378.0 5197	2524.0 5197	1980.0 5165	1822.0 5246
8TH LARGEST	2168.0 5139	2250.0 5219	2397.0 5099	2525.0 5151	1988.0 5246	1822.0 5275
7TH LARGEST	2205.0 5219	2284.0 5151	2424.0 5219	2530.0 5051	1990.0 5175	1825.0 5012
6TH LARGEST	2305.0 5051	2289.0 5051	2453.0 5051	2714.0 5122	1995.0 5060	1833.0 5173
5TH LARGEST	2335.0 5099	2316.0 5099	2510.0 5264	2720.0 5099	2013.0 5217	1849.0 5017
4TH LARGEST	2352.0 5060	2463.0 5218	2587.0 5060	2746.0 5218	2043.0 5205	1875.0 5239
3RD LARGEST	2625.0 5122	2538.0 5060	2875.0 5122	2762.0 5264	2103.0 5017	1891.0 5265
2ND LARGEST	2662.0 5124	2538.0 5181	3033.0 5124	2911.0 5060	2155.0 5051	1898.0 5264
1ST LARGEST	2769.0 5181	2592.0 5124	3137.0 5181	2916.0 5181	2155.0 5181	1907.0 5130
	2996.0 5218	2583.0 5122	3222.0 5218	2993.0 5124	2170.0 5264	1974.0 5051
THE MEAN VALUE	1708.49	1715.21	1886.38	1919.25	1578.37	1740.37
STD. DEVIATION	384.84	355.09	416.17	401.64	263.78	69.68
COEFF/VARIATION	22.53	20.74	22.13	20.93	16.71	4.00
VETA ONE	.46	.35	.65	.53	.36	.28
VETA TWO	3.98	2.85	4.07	3.01	2.54	3.69
(N-20)-AVG EST	1698.12	1702.02	1861.77	1896.30	1565.46	1739.62
(N-20)-S.D. EST	341.53	350.72	377.92	387.73	293.70	63.70
PCT DIFF/MEANS	3.	4.	5.	6.	4.	1.
PCT DIF/ST DVS	13.	1.	10.	4.	-10.	9.
SIZE OF SAMPLE	102	102	102	102	102	102

MEN'S ARMY SUB-SERIES STATIC MUSCLE STRENGTH

A SUMMARY OF THE MATERIAL ALREADY PRESENTED EITHER ON THE PRECEDING PAGES OR ON THE PUNCHED RANGE CARDS

NO.	VARIABLE NAME	MEAN	STD DEV	V-I	V-II	V	DELTA	UELS	N	MINIMUM	MIN	MAX	AVG	INTV1	INTV2	CF1	CF2
1	STRNGTH/2H 38CM	M1 2204.92	454.14	.21	2.41	23.1X	2.7	-7.0	102	1433.01397	53455.02265.0	80.00	50.00	50.00	50.00	.04536	2.20462
2	STRNGTH/2H 38CM	M2 2290.27	420.11	.36	2.62	18.3X	4.4	-1.4	102	1483.0147.53443.02290.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
3	STRNGTH/2H 38CM	P1 2451.01	459.21	.21	2.35	18.7X	2.3	-8.4	102	1566.01547.53565.02452.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
4	STRNGTH/2H 38CM	P2 2510.32	399.90	.33	2.94	15.9X	4.2	1.5	102	1660.01647.53589.02510.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
5	STRNGTH/2H 50CM	M1 2250.93	401.14	.35	2.70	17.8X	4.5	.7	102	1491.01447.53234.02251.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
6	STRNGTH/2H 50CM	M2 2274.25	390.10	.55	3.04	17.5X	6.5	1.3	102	1509.01547.53389.02274.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
7	STRNGTH/2H 50CM	P1 2472.02	430.48	.37	2.64	17.4X	4.3	1.5	102	1562.01547.53603.02472.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
8	STRNGTH/2H 50CM	P2 2485.49	411.47	.40	2.90	16.6X	5.3	.4	102	1733.01697.53665.02485.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
9	STRNGTH/2H 100CM	M1 1467.58	323.61	.55	2.91	22.1X	5.4	-3.4	102	876.0 847.52485.01468.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
10	STRNGTH/2H 100CM	M2 1494.20	329.72	.57	3.21	22.7X	6.1	1.2	102	830.0 797.52480.01494.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
11	STRNGTH/2H 100CM	P1 1596.03	330.51	.51	2.68	20.7X	5.4	-6.2	102	945.0 897.52580.01596.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
12	STRNGTH/2H 100CM	P2 1594.98	350.95	.47	2.80	22.0X	4.2	-4.6	102	904.0 897.52598.01595.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
13	STRNGTH/2H 150CM	M1 1480.53	394.40	.53	2.78	20.6X	5.7	-3.9	102	920.0 737.52644.01481.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
14	STRNGTH/2H 150CM	M2 1519.05	437.27	.67	4.32	24.9X	7.2	.5	102	792.0 717.53268.01516.0	100.00	80.00	80.00	80.00	80.00	.04536	2.20462
15	STRNGTH/2H 150CM	P1 1642.63	421.91	.76	3.75	25.7X	7.0	.3	102	919.0 897.53187.01643.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
16	STRNGTH/2H 150CM	P2 1672.86	452.82	1.06	5.33	27.1X	8.4	6.5	102	903.0 877.53642.01673.0	100.00	80.00	80.00	80.00	80.00	.04536	2.20462
17	STRNGTH/1H 100CM	M1 917.40	288.82	.65	3.49	31.5X	7.3	7.0	102	422.0 417.51756.0 917.0	50.00	30.00	30.00	30.00	30.00	.04536	2.20462
18	STRNGTH/1H 106CM	M2 933.25	282.10	.34	3.01	30.2X	3.5	2.0	102	395.0 387.51749.0 933.0	50.00	30.00	30.00	30.00	30.00	.04536	2.20462
19	STRNGTH/1H 100CM	P1 1048.74	327.70	.77	3.99	31.2X	9.2	15.5	102	447.0 397.52187.01049.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
20	STRNGTH/1H 100CM	P2 1077.69	317.41	.47	3.05	29.5X	3.5	11.2	102	452.0 447.52186.01077.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
21	STRNGTH/1H 45 C	M1 1004.89	307.54	-.09	2.19	34.7X	-7.7	-10.5	102	344.0 327.51621.01001.0	50.00	30.00	30.00	30.00	30.00	.04536	2.20462
22	STRNGTH/1H 45 C	M2 1048.91	313.87	-.21	2.07	29.9X	-2.0	-13.0	102	410.0 387.51669.01049.0	50.00	30.00	30.00	30.00	30.00	.04536	2.20462
23	STRNGTH/1H 45 C	P1 1146.72	330.57	-.23	2.14	28.8X	-1.9	-11.5	102	499.0 477.51750.01147.0	50.00	30.00	30.00	30.00	30.00	.04536	2.20462
24	STRNGTH/1H 45 C	P2 1172.54	334.10	-.14	2.11	28.5X	-9.9	-11.4	102	482.0 477.51844.01173.0	50.00	30.00	30.00	30.00	30.00	.04536	2.20462
25	STRNGTH/1H 45 S	M1 867.17	263.05	.28	2.56	30.3X	3.1	-7.3	102	432.0 422.51601.0 867.0	50.00	25.00	25.00	25.00	25.00	.04536	2.20462
26	STRNGTH/1H 45 S	M2 931.85	252.12	.32	2.60	27.1X	2.8	-7.4	102	462.0 447.51700.0 932.0	50.00	30.00	30.00	30.00	30.00	.04536	2.20462
27	STRNGTH/1H 45 S	P1 998.62	289.16	.24	2.61	29.0X	2.3	-7.2	102	502.0 477.51841.0 999.0	50.00	30.00	30.00	30.00	30.00	.04536	2.20462
28	STRNGTH/1H 45 S	P2 1055.84	269.25	.31	2.96	29.5X	1.7	-6.1	102	525.0 507.51955.01056.0	50.00	30.00	30.00	30.00	30.00	.04536	2.20462
29	STRNGTH/2H 38CM	M1 1977.71	442.47	.31	2.69	22.4X	3.2	-3.9	102	1022.0 997.53163.01978.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
30	STRNGTH/2H 38CM	M2 1994.39	406.18	.19	3.06	20.4X	2.1	.4	102	1057.01047.53246.01994.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
31	STRNGTH/2H 38CM	P1 2165.38	447.63	.47	3.14	20.7X	4.5	2.6	102	1229.01197.53448.02165.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
32	STRNGTH/2H 38CM	P2 2204.35	438.37	.31	3.12	18.5X	3.1	12.7	102	1280.01247.53373.02204.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
33	STRNGTH/2H 50CM	M1 1700.49	384.84	.46	3.58	22.5X	3.0	2.1	102	816.0 797.52996.01700.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
34	STRNGTH/2H 50CM	M2 1715.21	355.69	.35	2.85	20.7X	3.8	1.4	102	935.0 897.52583.01715.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
35	STRNGTH/2H 50CM	P1 1800.38	416.17	.65	4.07	22.1X	4.9	10.1	102	899.0 897.53222.01800.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
36	STRNGTH/2H 50CM	P2 1919.25	401.64	.53	3.01	20.9X	5.9	3.6	102	1175.01147.52993.01919.0	80.00	50.00	50.00	50.00	50.00	.04536	2.20462
37	WEIGHT	1578.37	263.78	.30	2.54	16.7X	4.4	-10.2	102	650.0 837.52170.01578.0	50.00	30.00	30.00	30.00	30.00	.04536	2.20462
38	STATUS	1740.37	69.00	.28	3.69	4.0X	1.2	9.4	102	1588.01587.51974.01740.0	15.00	10.00	10.00	10.00	10.00	.10000	.39370

NOT AVAILABLE COPY

APPENDIX D

BIVARIATE FREQUENCY TABLES - DATA FOR MALE SOLDIERS

The following pages contain a set of 51 selected bivariate frequency tables based on data from the Army men's subsurvey. All are standard tables. The construction and labelling of these tables followed the procedures used in creating the tables based on the women's data (Churchill, Thomas, Edmund Churchill, John T. McConville, and Robert M. White. 1977. Anthropometry of Women of the U.S. Army--1977, Report No. 3 - Bivariate Frequency Tables. Technical Report No. NATICK/TR-77/028, U.S. Army Natick Research and Development Command, Natick, Massachusetts).

For the reader's convenience, an index of the 51 bivariate frequency tables is provided below.

INDEX OF BIVARIATE TABLES

No.	Page	No.	Page
1 Weight/Stature	180	27 Stature/Shldr-Elbow Lgth	206
2 Weight/Chest Circ	181	28 Stature/Elb-Fingertip Lgth	207
3 Weight/Waist Circ-Nat	182	29 Stature/Buttock-Knee Lgth	208
4 Weight/Waist Circ-Omp	183	30 Chest Height/Chest Circ	209
5 Weight/Hip Circ	184	31 Waist Ht-Nat/Waist Ht-Omp	210
6 Weight/Interscye Back	185	32 Waist Ht-Nat/Waist C-Omp	211
7 Weight/Interscye Front	186	33 Waist Ht-Nat/Glu Fur Ht	212
8 Weight/Back Arc, Chest	187	34 Waist Ht-Omp/Waist C-Omp	213
9 Weight/Back Arc, Waist	188	35 Elbow Ht/Knuckle Ht	214
10 Weight/Back Arc, Hip	189	36 Buttock Ht/Hip Circ	215
11 Stature/Axilla Height	190	37 Buttock Ht/Glu Fur Ht	216
12 Stature/Suprasternale Ht	191	38 Acromion-Rad/Radiale-Styl	217
13 Stature/Chest Height	192	39 Sitting Ht/Eye Ht-Sit	218
14 Stature/Substernale Ht	193	40 Foot Lgth/Foot Breadth	219
15 Stature/Waist Ht-Natural	194	41 Foot Lgth/Foot Circ	220
16 Stature/Waist Ht-Omp	195	42 Interscye F/Interscye B	221
17 Stature/Elbow Height	196	43 Waist Front/Waist Back	222
18 Stature/Buttock Height	197	44 Glu Fur Ht/Tibiale Ht	223
19 Stature/Knuckle Height	198	45 Head Circ/Head Length	224
20 Stature/Gluteal Furrow Ht	199	46 Head Circ/Head Breadth	225
21 Stature/Tibiale Height	200	47 Head Length/Head Breadth	226
22 Stature/Sitting Height	201	48 Chest Circ/Waist Circ-Nat	227
23 Stature/Eye Height, Sit	202	49 Hand Lgth/Palm Lgth	228
24 Stature/Midshoulder Ht	203	50 Hand Lgth/Hand Circ	229
25 Stature/Knee Height	204	51 Hand Lgth/Hand Breadth	230
26 Stature/Popliteal Ht	205		

TABLE 1

A BIVARIATE FREQUENCY TABLE FOR
WEIGHT AND STATURE

WEIGHT

	106 .75	116 .75	126 .75	136 .75	146 .75	156 .75	166 .75	176 .75	186 .75	196 .75	206 .75	216 .75	226 .75	236 .75	TOT ALS
137.75												1			1
139.75															0
141.75															1
143.75															1
145.75															1
147.75															3
149.75												1			5
151.75															5
153.75															8
155.75															20
157.75															25
159.75															26
161.75															37
163.75															33
165.75															31
167.75															28
169.75															29
171.75															10
173.75															8
175.75															4
177.75															4
179.75															6
181.75															1
183.75															1
185.75															1
187.75															1
189.75															1
191.75															1
193.75															1
195.75															1
197.75															1
199.75															1
201.75															1
203.75															1
205.75															1
207.75															1
209.75															1
211.75															1
213.75															1
215.75															1
217.75															1
219.75															1
221.75															1
223.75															1
225.75															1
227.75															1
229.75															1
231.75															1
233.75															1
235.75															1
237.75															1
239.75															1
241.75															1
243.75															1
245.75															1
247.75															1
249.75															1
251.75															1
253.75															1
255.75															1
257.75															1
259.75															1
261.75															1
263.75															1
265.75															1
267.75															1
269.75															1
271.75															1
273.75															1
275.75															1
277.75															1
279.75															1
281.75															1
283.75															1
285.75															1
287.75															1
TOTALS	3	8	22	62	52	41	27	24	18	18	5	6	0	1	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- STATURE	174.07	6.82	$.10^*X + 149.111$	5.61	.569
X- WEIGHT	156.02	24.22	$2.02^*Y + -195.013$	19.91	

TABLE 2

A BIVARIATE FREQUENCY TABLE FOR
WEIGHT AND CHEST CIRCUMFERENCE

	WEIGHT																	TOT
	106	116	126	136	146	156	166	176	186	196	206	216	226	236	246	256	266	ALS
110.75																		4
108.75								1			1	1						3
106.75								1	2	2		1		1				7
104.75								2	1	1	2							6
102.75							1	2	3	6		2						14
100.75							3	3	2	4	1							13
98.75							6	2	6									18
96.75						4	5	5	3	3								22
94.75					1	10	7	3		1								29
92.75				3	4	12	6	7										25
90.75				10	18	6	3	1	1									39
88.75			5	20	13	3												41
86.75			7	15	2	2												27
84.75		1	4	7	11	5	1											28
82.75		1	1	1	2													5
80.75	1	1	1	2														4
78.75	1	1	1															2
TOTALS	3	8	22	62	92	41	27	24	18	18	5	6	0	1				287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- CHEST CIRCUMFERENCE	92.90	6.60	.24*X +	3.07	.885
X- WEIGHT	156.02	24.22	3.25*Y +	11.27	

TABLE 3

A BIVARIATE FREQUENCY TABLE FOR
WEIGHT AND WAIST CIRCUMFERENCE/NATURAL

WEIGHT

	106	116	126	136	146	156	166	176	186	196	206	216	226	236	101
107.75														1	1
105.75												1			1
103.75											1	1			2
101.75										1					1
99.75										1		1			2
97.75								1		3					1
95.75							1	1	3	2		1			5
93.75								2	2	1	2				9
91.75								1	1	1	1	2			8
89.75							1	2	1	1	1				6
87.75								4	2	3					6
85.75						4	5	2	3	5					19
83.75				1	3	1	3	4	2	2					13
81.75				2	4	10	5	1		2					13
79.75				1	6	8	4	4	1	1					24
77.75				1	16	19	9	3	1	2					21
75.75			1	3	19	12	6	2							51
73.75				7	14	4	1								43
71.75															27
69.75			1	2	4	8	2								16
67.75			3	6	1	2									13
65.75			1												4
63.75			1												1
TOTALS	3	8	22	62	52	41	27	24	16	18	5	6	0	1	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y-WAIST CIRCUMFERENCE/NATURAL	78.68	8.04	.29*X +	4.07	.863
X-WEIGHT	156.02	24.22	2.60*Y +	12.25	

TABLE 4

A BIVARIATE FREQUENCY TABLE FOR
WEIGHT AND WAIST CIRCUMFERENCE/OMPHALION

WEIGHT

	106	116	126	136	146	156	166	176	186	196	206	216	226	236	TOT
107.75															1
105.75												2			2
103.75										1					2
101.75										1					1
99.75										2					4
97.75												1			1
95.75															8
93.75															3
91.75															9
89.75															4
87.75															9
85.75															17
83.75															14
81.75															13
79.75															26
77.75															21
75.75															52
73.75															39
71.75															29
69.75															15
67.75															12
65.75															3
63.75															2
TOTALS	3	8	22	62	52	41	27	24	18	18	5	6	0	1	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y-WAIST CIRCUMFERENCE/OMPHALION	78.87	8.29	.29*X +	4.26	.858
X-WEIGHT	156.02	24.22	2.50*Y +	12.45	

TABLE 5

A BIVARIATE FREQUENCY TABLE FOR
WEIGHT AND HIP CIRCUMFERENCE

	WEIGHT																	TOTAL
	106	116	126	136	146	156	166	176	186	196	206	216	226	236	246	256	266	TOTAL
114.75																		1
112.75											1	1						2
110.75										1		1						2
108.75									1	2	2							7
106.75									1	5		2						8
104.75									3	6	1							11
102.75							1		2	2								7
100.75							3	10	7	1								23
98.75							5	12	3	1								27
96.75							7	12	1									25
94.75							15	3										33
92.75							9	9										41
90.75							30	11	2									46
88.75							11	19	4									36
86.75							7	2										15
84.75							2											3
TOTALS	3	8	22	62	52	41	27	24	18	18	5	6	0	1	287			

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- HIP CIRCUMFERENCE	95.14	6.04	$.23 \cdot X +$	2.14	.935
X- WEIGHT	156.02	24.22	$3.75 \cdot Y +$	8.58	

TABLE 6

A BIVARIATE FREQUENCY TABLE FOR
HEIGHT AND INTERSCYE BACK

	HEIGHT																	TOT	ALS
	106	116	126	136	146	156	166	176	186	196	206	216	226	236	246	256	266		
48.25							2	1	1	4							1	1	
47.25							1	1	1	1								8	
46.25											1							4	
45.25						4	1	2	2	3	1							13	
44.25				4	1	5	2	4	2	3		2		1				24	
43.25		1	4	4	8	5	2	2	4	3		2						31	
42.25		1	4	6	7	3	3	4	3	1								28	
41.25			4	12	8	7	5	1	1	1	3	1						42	
40.25			1	8	10	9	5	5	2	1								41	
39.25		1	3	12	5	4	5	1	4	1								36	
38.25	1	3	5	5	4	4		2										24	
37.25			3	6	4	4	1	1										15	
36.25	1	1	3	2	4													11	
35.25	1	2		1	1													5	
34.25			1	1														2	
33.25			1	1														2	
TOTALS	3	8	22	62	52	41	27	24	18	18	5	6	0	1	1	287			

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
INTERSCYE BACK	41.02	2.81	$.06^*X +$	2.35	.548
HEIGHT	156.02	24.22	$4.72^*Y +$	20.26	

TABLE 7

A BIVARIATE FREQUENCY TABLE FOR
WEIGHT AND INTERSCYE FRONT

WEIGHT

	106	116	126	136	146	156	166	176	186	196	206	216	226	236	TOT
41.50															1
41.00						1		1		2	1	2			7
40.50									1		1	2			4
40.00								1	2	1					6
39.50						1		2	1	1					9
39.00			1		2	2	1	1	2	2	1	1		1	13
38.50			1		1	4	3	3	5	2		1			20
38.00					0	8	1	4	2	3					24
37.50					1	5	5	4	2	1	1				29
37.00					1	7	3	3	1	1					19
36.50					2	10	8	4	1	2	3				33
36.00					1	2	9	6	2	1	1				26
35.50					3	3	6	4	1	5					29
35.00	1				4	5	5	1							19
34.50					4	5	2	2		1					17
34.00					1	6	5								13
33.50					1	1	1								3
33.00					2	7									10
32.50															3
32.00															1
31.50															1
TOTALS	3	8	22	62	52	41	27	24	18	18	5	6	0	1	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- INTERSCYE FRONT	36.67	1.96	$.05^*X +$	1.47	.660
X- WEIGHT	156.02	24.22	$8.18^*Y +$	18.19	

TABLE 8

A BIVARIATE FREQUENCY TABLE FOR
WEIGHT AND BACK ARC, CHEST

	WEIGHT																	TOT
	100	116	126	136	146	156	166	176	186	196	206	216	226	236	246	256	266	ALS
54.25								1		1		2						4
53.25											1	1						2
52.25							1			4	2							7
51.25						1		1	1	3	1	2		1				10
50.25							1	2	2	2								7
49.25						2	3	5	4	3	1	1						19
48.25					2	4	3	2	3	3								17
47.25				1	3	3	6	2	4									19
46.25				1	5	7	4	3	2	1								23
45.25				9	6	5	3	5	1	1								30
44.25			3	10	12	8	5	3										39
43.25			4	13	11	3												32
42.25		1	7	19	7	7	1		1									42
41.25	1	2	3	5	5	3												19
40.25	1	3	3	4	1													12
39.25		1	2															3
38.25	1	1																2
TOTALS	3	8	22	62	52	41	27	24	18	18	5	6	0	1	1	287		

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- BACK ARC, CHEST	45.17	3.37	$.11^*X +$	28.011	1.95
X- WEIGHT	156.02	24.22	$5.86^*Y +$	-108.698	14.03
					.815

TABLE 9

A BIVARIATE FREQUENCY TABLE FOR
WEIGHT AND BACK ARC, WAIST

WEIGHT

	106	116	126	136	146	156	166	176	186	196	206	216	TOT
54.25	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	1
53.25											1		1
52.25													0
51.25													0
50.25													0
49.25							1			2		1	4
48.25								1	1	1			3
47.25							1	2	3	1		1	6
46.25								1	2	1	1		6
45.25						2	1	1	2	1	2	1	10
44.25						2	3	4	1	3			13
43.25				1		1	6	3	3	3			11
42.25					1	2	5	4	1	1	1		16
41.25				1	3	3	1	4	1	1			18
40.25					4	11	1	2	1				20
39.25						6	5		1	1			30
38.25				8	11	6	3		1				43
37.25			1	15	15	6	2	1					42
36.25			3	14	11	7	3	1	1				21
35.25				13	2		1						20
34.25			2	9	3	1							5
33.25	1		3		1								7
32.25	2		2		1								2
31.25		2			1								2
TOTALS	3	8	22	62	52	41	27	24	18	18	5	5	285

TABLE 10

A BIVARIATE FREQUENCY TABLE FOR
WEIGHT AND BACK ARC, HIP

WEIGHT

	106	116	126	136	146	156	166	176	186	196	206	216	226	236	TOT
58.75															1
57.75															0
56.75															0
55.75															1
54.75															2
53.75															7
52.75															4
51.75															10
50.75															13
49.75															19
48.75															25
47.75															20
46.75															33
45.75															30
44.75															52
43.75															38
42.75															21
41.75															9
40.75															1
39.75															1
TOTALS	3	8	22	62	52	41	27	24	18	18	5	6	0	1	287

SUMMARY STATISTICS

	MEAN	STU DEV	REGRESSION EQUATIONS	SE-EST	R
Y- BACK ARC, HIP	46.57	3.13	$.11^*X + 29.403$	1.61	.657
X- WEIGHT	156.02	24.22	$6.63^*Y + -152.711$	12.46	

TABLE 11

A BIVARIATE FREQUENCY TABLE FOR
STATURE AND AXILLA HEIGHT

STATURE

	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	TOTAL
149.75																								1
147.75																								0
145.75																			1	1	1			3
143.75																		2	1					3
141.75																		1	2	2	1			7
139.75																		1	6	6	2	1		16
137.75														2	9	12	1							20
135.75													2	16	13	7	1							24
133.75												4	13	17	3									41
131.75											7	13	12	2	1									40
129.75										2	8	12	12	2										37
127.75										1	7	11	12											35
125.75										1	3	13	9											26
123.75										1	5	6												12
121.75										1	3	4	1	1										10
119.75										1	2	1	2											7
117.75										1														1
115.75																								3
113.75																								1
TOTALS	2	1	1	6	4	8	10	29	28	31	33	37	28	25	20	8	5	5	3	1	1	0	1	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- AXILLA HEIGHT	131.24	5.89	$.84^*X -$	1.48	.968
X- STATURE	174.07	6.82	$1.12^*Y +$	1.71	

TABLE 12

A BIVARIATE FREQUENCY TABLE FOR
STATURE AND SUPRASTERNAL HEIGHT

STATURE

	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	101
162.75																								1
160.75																								0
158.75																				1				1
156.75																			1	2				1
154.75																			4	1				4
152.75																								5
150.75																								7
148.75																								13
146.75																								25
144.75																								27
142.75																								37
140.75																								43
138.75																								36
136.75																								30
134.75																								26
132.75																								10
130.75																								12
128.75																								3
126.75																								4
124.75																								1
TOTALS	2	1	1	1	6	4	8	10	29	28	31	33	37	28	25	20	8	5	5	3	1	1	0	1
																								287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y - SUPRASTERNAL HEIGHT	142.70	6.09	$.07 \cdot X$	1.24	.979
X - STATURE	174.07	6.82	$1.10 \cdot Y$	1.38	

TABLE 13

A BIVARIATE FREQUENCY TABLE FOR
STATURE AND CHEST HEIGHT

STATURE

	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	TOT
146.75																								1
144.75																								0
142.75																								1
140.75																								2
138.75																								3
136.75																								12
134.75																								10
132.75																								26
130.75																								36
128.75																								33
126.75																								46
124.75																								37
122.75																								23
120.75																								23
118.75																								12
116.75																								5
114.75																								4
112.75																								1
110.75																								2
TOTALS	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	207

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- CHEST HEIGHT	127.43	5.67	$.80^*X -$	1.65	.957
X- STATURE	174.07	6.82	$1.15^*Y +$	1.98	

TABLE 14

A BIVARIATE FREQUENCY TABLE FOR
STATURE AND SUBSTERNAL HEIGHT

STATURE

	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	TOT
140.75																								1
138.75																								0
136.75																		1						1
134.75																		2						2
132.75																		1						11
130.75																		2						15
128.75																		2						15
126.75																		4						36
124.75																		7						33
122.75																		1						40
120.75																		2						56
118.75																		2						29
116.75																		4						15
114.75																		5						18
112.75																		2						5
110.75																		2						6
108.75																		1						2
106.75																		1						1
104.75																		1						1
TOTALS	2	1	1	1	6	4	8	10	29	28	31	33	37	28	25	20	8	5	5	3	1	1	0	1 287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- SUBSTERNAL HEIGHT	122.57	5.49	.76*X -	9.729	1.90
X- STATURE	174.07	6.82	1.16*Y +	31.895	2.36
					.938

TABLE 15

A BIVARIATE FREQUENCY TABLE FOR
STATURE AND WAIST HEIGHT/NATURAL

STATURE

	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	TOT
110.75																								2
112.75																								3
114.75																								13
116.75																								7
118.75																								23
120.75																								31
122.75																								25
124.75																								54
126.75																								33
128.75																								33
130.75																								22
132.75																								14
134.75																								17
136.75																								6
138.75																								4
140.75																								207
TOTALS	2	1	1	1	6	4	8	10	29	28	31	33	37	28	20	8	5	5	3	1	1	0	1	207

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- WAIST HEIGHT/NATURAL	104.12	5.75	$.71 \cdot X$	19.474	.844
X- STATURE	174.07	6.82	$1.00 \cdot Y$	69.956	3.66

TABLE 16

STATURE

SUMMARY STATISTICS

[illegible]

TABLE 17

A BIVARIATE FREQUENCY TABLE FOR
STATURE AND ELBOW HEIGHT

STATURE

	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	TOT
126.75																								1
124.75																								0
122.75																								1
120.75																								4
118.75																								8
116.75																								15
114.75																								25
112.75																								36
110.75																								50
108.75																								40
106.75																								40
104.75																								35
102.75																								11
100.75																								14
98.75																								3
96.75																								2
94.75																								2
TOTALS	2	1	1	1	6	4	8	10	29	28	31	33	37	28	25	20	8	5	5	3	1	1	0	1 207

SUMMARY STATISTICS

	MEAN	STJ	DEV	REGRESSION EQUATIONS	SE-EST	R
Y- ELBOW HEIGHT	109.40	5.05		.69*X -	10.709	1.87
X- STATURE	174.07	6.82		1.25*Y +	37.321	2.52
						.929

TABLE 10

A BIVARIATE FREQUENCY TABLE FOR
STATURE AND BUTTOCK HEIGHT

STATURE

	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	TOTAL
105.75																								1
103.75																			1					1
101.75																			1	1				2
99.75																			1					5
97.75																								11
95.75																								22
93.75																								27
91.75																								46
89.75																								48
87.75																								45
85.75																								27
83.75																								24
81.75																								12
79.75																								10
77.75																								5
75.75																								1
TOTALS	2	1	1	6	4	8	10	29	28	31	33	37	28	25	20	8	5	5	3	1	1	0	1	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- BUTTOCK HEIGHT	89.41	5.07	.63*X	2.65	.852
X- STATURE	174.07	6.82	1.15*Y	3.56	

TABLE 19

A BIVARIATE FREQUENCY TABLE FOR
STATURE AND KNUCKLE HEIGHT

STATURE

	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	TOT
86.75																								1
86.75																			1					1
84.75																		2						4
82.75													1	2	4	8	2	1			1			12
80.75										1	3	6	9	8	5	7	2							23
78.75									1	4	9	9	7	9	4			1						43
76.75							2	2	5	10	8	11	6	1			2							51
74.75						1	2	1	11	9	6	5	3	1										53
72.75				2		2	1	4	7	6	4	2	1	2										49
70.75																								29
68.75			1	2	1	1	2	4	1															12
66.75	1	1		1		2	1																	6
64.75				1																				2
62.75																								1
TOTALS	2	1	1	6	4	8	10	29	28	31	33	37	28	25	20	8	5	5	3	1	1	0	1	207

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- KNUCKLE HEIGHT	75.51	4.11	$.48^*X$	2.52	.791
X- STATURE	174.07	6.82	1.31^*Y	4.17	

TABLE 20
A BIVARIATE FREQUENCY TABLE FOR
STATURE AND GLUTEAL FURROW HEIGHT

STATURE

	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	TOT
94.75																								1
92.75																								0
90.75																								3
88.75																								15
86.75																								13
84.75																								25
82.75																								44
80.75																								50
78.75																								49
76.75																								39
74.75																								21
72.75																								13
70.75																								4
68.75																								1
66.75																								1
TOTALS	2	1	1	0	4	8	10	29	28	31	33	37	28	25	20	8	5	5	3	1	1	0	1	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- GLUTEAL FURROW HEIGHT	80.37	4.42	$.54X$	2.47	.828
X- STATURE	174.07	6.82	$1.28Y$	3.82	

TABLE 21

A BIVARIATE FREQUENCY TABLE FOR
STATURE AND TIBIALE HEIGHT

STATURE

	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	TOT
55.75																								2
54.75																								3
53.75																								2
52.75																								16
51.75																								21
50.75																								28
49.75																								31
48.75																								39
47.75																								41
46.75																								44
45.75																								25
44.75																								11
43.75																								6
42.75																								7
41.75																								4
40.75																								3
TOTALS	2	1	1	1	6	4	7	10	29	28	30	33	37	28	24	19	8	5	5	3	1	1	0	1
																								263
																								NUMBER EXCLUDED
																								TOTAL 267

SUMMARY STATISTICS

	MEAN	STJ DEV	REGRESSION EQUATIONS	SE-EST	R
Y- TIBIALE HEIGHT	47.64	6.30	.34X	5.85	.369
X- STATURE	174.07	6.82	.40*Y	6.34	

TABLE 22

A BIVARIATE FREQUENCY TABLE FOR
STATURE AND SITTING HEIGHT

STATURE

	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	TOTAL
100.25																								2
99.25																								0
98.25																								2
97.25																								3
96.25																								7
95.25																								7
94.25																								10
93.25																								14
92.25																								28
91.25																								28
90.25																								32
89.25																								35
88.25																								36
87.25																								29
86.25																								22
85.25																								11
84.25																								11
83.25																								6
82.25																								4
81.25																								3
80.25																								1
79.25																								1
78.25																								1
TOTALS	2	1	1	6	1	4	8	10	29	28	31	33	37	28	25	20	8	5	5	3	1	1	0	1

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- SITTING HEIGHT	89.34	3.63	$.38^*X +$	2.53	.717
X- STATURE	174.07	6.82	$1.35^*Y +$	4.76	

TABLE 23

A BIVARIATE FREQUENCY TABLE FOR
STATURE AND EYE HEIGHT, SITTING

STATURE

153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	TOT		
.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	ALS		
86.25																							3		
85.25																	2						2		
84.25									1			1	1	1	1	1	1				1		6		
83.25							1				1	2	2	2	1	1	1		1				9		
82.25										3	1	2	4	2	2	2	1	2					10		
81.25							1	1			5	3	6	3	1	2	1						17		
80.25								2	2	4	6	3	8	4	4	3	1						19		
79.25					2	1	2	3	2	6	6	6	4	4	2	2	1						29		
78.25					1	1	1	4	7	7	5	2	2	2	2								33		
77.25			1				5	3	6	6	7	2	4	3	3	1							33		
76.25						1	1	7	7	2	2	3	2	2	1								38		
75.25	1				5	1	5	2	3	2	3	1	1										19		
74.25			1			1	4	3	5		1												16		
73.25			1	1	1	2	1	2															7		
72.25			1	1	1	1	1	1				1											5		
71.25			1	1	1	1	1	1															5		
70.25							2	1	1														8		
69.25	1						2	1	1														1		
68.25																							1		
67.25			1																				2		
TOTALS	2	1	1	1	6	4	6	10	29	28	31	33	37	26	25	20	6	5	5	3	1	1	0	1	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- EYE HEIGHT, SITTING	77.42	3.39	$.34^*X +$	2.50	.876
X- STATURE	174.07	6.62	$1.36^*Y +$	5.03	

TABLE 24
A BIVARIATE FREQUENCY TABLE FOR
STATURE AND MIDSHOULDER HEIGHT

STATURE

	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	TOT
69.25																								2
68.25													1					2						6
67.25												1	1				1	1						4
66.25												2	1	1			1	1		1				10
65.25												1	3	2			1							16
64.25												2	5	5			1							22
63.25												4	5	2			1							25
62.25												9	8	10			1							45
61.25												7	6	5			1							43
60.25												5	5	2										27
59.25												2	2	2										30
58.25												2	4	2										26
57.25												1	2	1										16
56.25																								8
55.25																								3
54.25																								2
53.25																								2
TOTALS	2	1	1	1	6	4	8	10	29	28	31	33	37	28	25	20	8	5	5	3	1	1	0	1 287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y - MIDSHOULDER HEIGHT	61.39	3.03	$.31^*X + 7.426$	2.18	.693
X - STATURE	174.07	6.02	$1.56^*Y + 70.307$	4.92	

A BIVARIATE FREQUENCY TABLE FOR STATURE AND KNEE HEIGHT

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y-	55.10	3.02	.38*X -	11.052	1.51
X-	174.07	6.82	1.95*Y +	66.636	3.41
					.866

TABLE 26

A BIVARIATE FREQUENCY TABLE FOR
STATURE AND POPLITEAL HEIGHT

STATURE

	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	TOT
	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75	ALS
52.25																								1
51.25																		1						2
50.25																		1						2
49.25																		2						10
48.25																		1						14
47.25																		2						24
46.25																		1						32
45.25																		2						36
44.25																		1						41
43.25																		1						46
42.25																		1						34
41.25																		1						17
40.25																		1						15
39.25																		1						5
38.25																		1						3
37.25																		1						5
TOTALS	2	1	1	1	1	4	8	10	29	28	31	33	37	28	25	20	8	5	5	3	1	1	0	1 287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y -	44.27	2.72	.34*X -	1.44	.847
X -	174.07	6.82	2.13*Y +	79.772	3.62

TABLE 27

A BIVARIATE FREQUENCY TABLE FOR
STATURE AND SHOULDER-ELBOW LENGTH

STATURE

	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	TOTAL
42.00																								1
41.50																			1					1
41.00																		1						1
40.50																			1					1
40.00																								2
39.50																								4
39.00																								10
38.50																								11
38.00																								9
37.50																								28
37.00																								21
36.50																								26
36.00																								33
35.50																								25
35.00																								31
34.50																								31
34.00																								19
33.50																								12
33.00																								10
32.50																								3
32.00																								4
31.50																								1
31.00																								2
TOTALS	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- SHOULDER-ELBOW LENGTH	36.32	1.85	$.22^*X -$	1.980	.817
X- STATURE	174.07	6.62	$3.00^*Y +$	65.126	3.93

TABLE 28

STATURE

SUMMARY STATISTICS

[illegible]

TABLE 29

A BIVARIATE FREQUENCY TABLE FOR
STATURE AND BUTTOCK-KNEE LENGTH

STATURE

	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	101
70.75																								1
69.75																								1
68.75																								0
67.75																								2
66.75																			1					6
65.75																			1					14
64.75																			4					12
63.75																								23
62.75																								35
61.75																								33
60.75																								34
59.75																								35
58.75																								28
57.75																								27
56.75																								17
55.75																								10
54.75																								1
53.75																								6
52.75																								2
TOTALS	2	1	1	6	4	8	10	29	28	31	33	37	28	25	20	8	5	5	3	1	1	0	1	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- BUTTOCK-KNEE LENGTH	60.78	3.07	.37*X	3.626	.828
X- STATURE	174.07	6.82	1.84*Y	62.237	

TABLE 30
A BIVARIATE FREQUENCY TABLE FOR
CHEST HEIGHT AND CHEST CIRCUMFERENCE

CHEST HEIGHT																				
	110	112	114	116	118	120	122	124	126	128	130	132	134	136	138	140	142	144	146	TOT
110.75						1			1	1	1									4
108.75							1		1	1	1		1							3
106.75						1		1	1	1	1		1							7
104.75					1	1	2						1	1						6
102.75					1	1		1	2	2	2	2	1	1	1				1	14
100.75										2	4	2	2	2			1			13
98.75							1	2	5	1	4	1	2	1						16
96.75					1	2		4	3	4	5	3	2	2	1	1				22
94.75					2	2	1	6	5	4	3	2	2	1	1					29
92.75					2	4	3	3	6	5	1	3	2	2						25
90.75					2	4	3	4	4	5	5	4	3	2		1				39
88.75					1	4	7	8	4	2	6	4	1	1						41
86.75					1	2	2	5	4	6	2	1	1	1						27
84.75					1	4	2	2	6	4	2	2	3	1						26
82.75							1		2											5
80.75						1		1	1											4
78.75																				2
TOTALS	2	1	4	5	12	23	23	37	48	33	36	26	18	12	3	2	1	4	1	287

SUMMARY STATISTICS

	MEAN	STJ	DEV	REGRESSION EQUATIONS	SE-EST	R
Y- CHEST CIRCUMFERENCE	92.90	6.60		$.28^*X + 57.223$	6.41	.238
X- CHEST HEIGHT	127.43	5.67		$.20^*Y + 108.846$	5.51	

TABLE 31

A BIVARIATE FREQUENCY TABLE FOR
 WAIST HEIGHT/NATURAL AND WAIST HEIGHT/OMPHALION

WAIST HEIGHT/NATURAL

	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	TOT
119.75																1
117.75													1	2		3
115.75													4	1	1	6
113.75													4			17
111.75													4			19
109.75							2	2		4	7	2	3			26
107.75							3	16	6	9	6	2				43
105.75							6	17	14	11	2	1				40
103.75						3	15	13	3	2	2					53
101.75						4	14	13	5	1						30
99.75						5	9	6								20
97.75						5	6	1	1							12
95.75						3	3									8
93.75						1	2									6
91.75						3	3									1
89.75						1	1									2
TOTALS	4	6	17	14	22	33	33	54	25	31	23	7	13	3	2	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- WAIST HEIGHT/OMPHALION	105.47	5.27	$.81^*X +$	2.51	.879
X- WAIST HEIGHT/NATURAL	104.12	5.75	$.96^*Y +$	2.74	

TABLE 32

A BIVARIATE FREQUENCY TABLE FOR
WAIST HEIGHT/NATURAL AND WAIST CIRCUMFERENCE/NATURAL

WAIST HEIGHT/NATURAL

	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	TOT
107.75																1
105.75				1												1
103.75							1				1					2
101.75							1									1
99.75								1								2
97.75				1					1							1
95.75	1	1				1				1		1				5
93.75			1	1	1	1	1	2		1					1	9
91.75				1	1	2		1			1		1		1	8
89.75				1			2		1				2			6
87.75						1		2	1	2						6
85.75				1		2	3	4	2	3	4					19
83.75			1				3	3		4			1	1		13
81.75		1			1	1	4	1	1	1	1		1	1		13
79.75		2	2	1	3	2	7	7	2	3	3		1	1		24
77.75		1	2	2	1	3	1	1	2	3	1	1	3			51
75.75			3	2	6	6	4	13	10	2	2	1	2	2		43
73.75		1	2	3	4	6	4	8	1	4	6	2	2			27
71.75			2	2	2	6	5	5		4	2	1				16
69.75	1		3	1	1	1	1	3	3	2						13
67.75	1		1		2	1	1	3	1	2						4
65.75	1															1
63.75				1						1						1
TOTALS	4	6	17	14	22	33	33	54	25	31	23	7	13	3	2	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y-WAIST CIRCUMFERENCE/NATURAL	76.68	8.04	.11*X +	67.223	6.01
X-WAIST HEIGHT/NATURAL	104.12	5.75	.06*Y +	99.398	5.73
					.086

TABLE 33

A BIVARIATE FREQUENCY TABLE FOR
WAIST HEIGHT/NATURAL AND GLUTEAL FURROW HEIGHT

WAIST HEIGHT/NATURAL

	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	TOTAL
94.75																1
92.75																0
90.75											1		1	1		3
88.75									2	4	2	1	7	2		15
86.75							1		2	1	2	1	2		1	13
84.75								5	1	5	9	2	3			25
82.75						2	4	10	5	14	7	2				44
80.75				1	3	6	6	23	10	6	2	1				58
78.75			1	3	3	11	13	13	5							49
76.75	1	2	2	2	10	13	5	2	2							39
74.75		1	7	6	2	1	3	1								21
72.75	1	2	5	2	3											13
70.75		1	2		1											4
68.75	1															1
66.75	1															1
TOTALS	4	6	17	14	22	33	33	54	25	31	23	7	13	3	2	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- GLUTEAL FURROW HEIGHT	80.37	4.42	$.65^*X +$	2.35	.846
X- WAIST HEIGHT/NATURAL	104.12	5.75	$1.10^*Y +$	3.06	

TABLE 34

A BIVARIATE FREQUENCY TABLE FOR
WAIST HEIGHT/OMPHALION AND WAIST CIRCUMFERENCE/OMPHALION

WAIST HEIGHT/OMPHALION

	89 .75	91 .75	93 .75	95 .75	97 .75	99 .75	101 .75	103 .75	105 .75	107 .75	109 .75	111 .75	113 .75	115 .75	117 .75	119 .75	TOT ALS
107.75									1								1
105.75							1		1								2
103.75							1		1								2
101.75							1										1
99.75						1											4
97.75										1	1						1
95.75					1	1						1					3
93.75									2	2			1				4
91.75							2		1	1	1		1				9
89.75					1												4
87.75										3	1	1	2		1		9
85.75				1			2		1	1	2	2	1		1		17
83.75									2	3	2	2	2	1			14
81.75							3		1	1		2	1				13
79.75			1				2		4	6		4	1	1	1		26
77.75					3		3		3	2	6						21
75.75				1	2		3		10	11	6	1	3				52
73.75			1	2	1		4		5	4	3	4	2				39
71.75			2	1	1		4		10	2	2	1	1				29
69.75					1		3		3	1	1	1					15
67.75	1		1	1		1	2		1	1	1	2					12
65.75	1										1						3
63.75																	2
TOTALS	2	1	6	8	12	20	30	40	40	43	26	19	17	6	3	1	267

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y-WAIST CIRCUMFERENCE/OMPHALION	78.67	8.29	$.29 \times X +$	48.200	0.15
X-WAIST HEIGHT/OMPHALION	105.47	5.27	$.12 \times Y +$	96.005	5.10

TABLE 35

A BIVARIATE FREQUENCY TABLE FOR
ELBOW HEIGHT AND KNUCKLE HEIGHT

ELBOW HEIGHT

	94	96	98	100	102	104	106	108	110	112	114	116	118	120	122	124	126	TOTAL
88.75																		1
86.75														1				1
84.75													2	2				4
82.75													5	1				12
80.75													1					23
78.75													5	1				43
76.75													3					51
74.75													5					53
72.75													11					49
70.75													4					29
68.75													1					12
66.75													4					6
64.75													1					2
62.75													1					1
TOTALS	2	2	3	14	11	35	40	40	50	36	25	15	8	4	1	0	1	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- KNUCKLE HEIGHT	75.51	4.11	$.70^*X -$	2.11	.859
X- ELBOW HEIGHT	109.40	5.05	$1.05^*Y +$	2.59	

TABLE 36
A BIVARIATE FREQUENCY TABLE FOR
BUTTOCK HEIGHT AND HIP CIRCUMFERENCE

	BUTTOCK HEIGHT																
	75	77	79	81	83	85	87	89	91	93	95	97	99	101	103	105	TOT
114.75										1							1
112.75								1			1						2
110.75						3	2	1		1							2
108.75						1	1									1	7
106.75		1							4				1				8
104.75				1	1		1	1	2	1	2	2	1				11
102.75			1	1	1			1	1	1	2	1					7
100.75		1	1	1	1	1	3	3	3	3	5	1			1		23
98.75			2	2	1	1	1	5	9	5	2	3		2			27
96.75				1	1	1	2	5	4	5	1	1	1				25
94.75			2	1	4	3	5	5	6	5	2	1	1				33
92.75				2	5	2	11	8	5	3	4	1					41
90.75		1	3	3	5	7	6	10	8	2		1	1				46
88.75		3	2	2	3	4	8	5	3	2	2	1					36
86.75	1	1			2	4	4	2	1								15
84.75			1					1			1						3
TOTALS	1	5	10	12	24	27	45	48	46	27	22	11	5	2	1	1	287

SUMMARY STATISTICS

	Y-	X-	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y-	HIP CIRCUMFERENCE		95.14	6.04	$.37^*X +$	5.75	.310
X-	BUTTOCK HEIGHT		89.41	5.07	$.26^*Y +$	4.82	

TABLE 37

A BIVARIATE FREQUENCY TABLE FOR
BUTTOCK HEIGHT AND GLUTEAL FURROW HEIGHT

BUTTOCK HEIGHT

	75	77	79	81	83	85	87	89	91	93	95	97	99	101	103	105	TOT
94.75																	1
92.75																	0
90.75									1	2	1	6	3	1	1		3
88.75										4	5	2	2				15
86.75											8	3					13
84.75						1			5	8	5						25
82.75							3	12	17	7	5						44
80.75					2	2	12	20	10	4	2						58
78.75					3	11	17	11	6	1							49
76.75			1	2	10	10	11	4	1								39
74.75			4	4	8	2	2	1									21
72.75		3	3	5	1	1											13
70.75		1	2	1													4
68.75		1															1
66.75	1																1
TOTALS	1	5	10	12	24	27	45	48	46	27	22	11	5	2	1	1	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- GLUTEAL FURROW HEIGHT	80.37	4.42	$.79^*X +$	1.93	.899
X- BUTTOCK HEIGHT	89.41	5.07	$1.03^*Y +$	2.22	

TABLE 38

A BIVARIATE FREQUENCY TABLE FOR
ACROMION-RADIALE AND RADIALE-STYLION

ACROMION-RADIALE

	28	29	30	31	32	33	34	35	36	37	38	39	TOT
31.50													1
31.00													0
30.50													5
30.00													6
29.50													6
29.00													12
28.50													22
28.00													27
27.50													36
27.00													26
26.50													33
26.00													47
25.50													29
25.00													13
24.50													11
24.00													6
23.50													4
23.00													1
22.50													0
22.00													1
21.50													1
TOTALS	1	0	2	1	2	1	2	1	2	1	2	1	207

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- RADIALE-STYLION	26.84	1.57	.63X +	1.08	.7
X- ACROMION-RADIALE	33.74	1.82	-.84Y +	1.25	

TABLE 39

A BIVARIATE FREQUENCY TABLE FOR
SITTING HEIGHT AND EYE HEIGHT, SITTING

SITTING HEIGHT

	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	TOTAL
86.25																								3
85.25																			1	1				2
84.25																		1	1	2	2			6
83.25																1	2	3	2			2		9
82.25																5	1	2	1	1				10
81.25																6	4	3	1					17
80.25												1				7	1							19
79.25												3	3			9	12	2						29
78.25												3	9	12	5	2	1							33
77.25												4	12	10	6	1								33
76.25												8	11	8	8									30
75.25												8	8	3										33
74.25												8	1											19
73.25												1	7	6	1									16
72.25												2	1	7	2									7
71.25												3	4	5	1									5
70.25												2	3	1	1									5
69.25												1	3	4	3									0
68.25																								1
67.25																								2
TOTALS	1	1	1	1	3	4	8	11	11	22	29	36	35	32	20	28	14	10	7	7	3	2	0	207

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- EYE HEIGHT, SITTING	77.42	3.39	$.88^*X -$	1.205	1.14
X- SITTING HEIGHT	89.34	3.63	$1.01^*Y +$	11.152	1.22
					.941

A BIVARIATE FREQUENCY TABLE FOR FOOT LENGTH AND FOOT BREADTH

FOOT LENGTH		22	23	23	24	24	25	25	26	26	27	27	28	28	29	29	TOT
		.50	.0	.50	.0	.50	.0	.50	.0	.50	.0	.50	.0	.50	.0	.50	ALS
11.55																	1
11.35																	1
11.15																	2
10.95																	11
10.75																	15
10.55																	23
10.35																	26
10.15																	31
9.95																	41
9.75																	45
9.55																	39
9.35																	23
9.15																	12
8.95																	7
8.75																	4
8.55																	2
8.35																	1
8.15																	2
TOTALS		1	0	4	6	8	18	25	43	34	44	34	30	16	16	7	286

NUMBER EXCLUDED 1

TOTAL 287

SUMMARY STATISTICS

	MEAN	STU DEV	REGRESSION EQUATIONS	SE-EST	R
Y-	9.88	.81	.30*X +	1.883	.52
X-	26.66	2.06	1.96*Y +	7.295	1.32
					.769

TABLE 41

A BIVARIATE FREQUENCY TABLE FOR
FOOT LENGTH AND FOOT CIRCUMFERENCE

FOOT LENGTH

	22	23	23	24	24	25	25	26	26	27	27	28	28	29	29	TOT
	.50	.0	.50	.0	.50	.0	.50	.0	.50	.0	.50	.0	.50	.0	.50	ALS
28.50																2
28.00															1	4
27.50															3	4
27.00															1	11
26.50															2	16
26.00															4	25
25.50															3	36
25.00															2	25
24.50															1	46
24.00															2	55
23.50															5	31
23.00															2	19
22.50															1	8
22.00															1	4
21.50															2	2
TOTALS	1	0	4	6	8	18	25	43	34	44	34	30	16	16	7	286

NUMBER EXCLUDED 1
TOTAL 287

SUMMARY STATISTICS

	MEAN	STU DEV	REGRESSION EQUATIONS	SE-EST	R
Y- FOOT CIRCUMFERENCE	25.15	1.29	.23*X +	19.022	1.19
X- FOOT LENGTH	26.66	2.06	.59*Y +	11.823	1.92
					.369

TABLE 42

A BIVARIATE FREQUENCY TABLE FOR
INTERSCYE FRONT AND INTERSCYE BACK

INTERSCYE FRONT

	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	TOT
48.25																						1
47.25																						8
46.25																						4
45.25																						13
44.25																						24
43.25																						31
42.25																						28
41.25																						42
40.25																						41
39.25																						36
38.25																						24
37.25																						15
36.25																						11
35.25																						5
34.25																						2
33.25																						2
TOTALS	1	1	3	10	3	13	17	19	29	26	33	19	29	24	20	13	9	6	4	7	1	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- INTERSCYE BACK	41.02	2.81	.51*X +	2.62	.357
X- INTERSCYE FRONT	36.67	1.96	.25*Y +	1.63	

TABLE 43

A BIVARIATE FREQUENCY TABLE FOR
WAIST FRONT AND WAIST BACK

WAIST FRONT

	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	TOT
52.75																		2
51.75									1			1		1	1	2		6
50.75										1		3	3	1	1			9
49.75									1		2	2		4			1	10
48.75										1	4	3	3	1		1		14
47.75			1				3	2	3	7	5	3	2	2	2			28
46.75				1		1	1	2	6	2	3	6	1	3	2			33
45.75							5	5	6	8	5	2	3	1	1			34
44.75							3	9	5	6	2	2	3					33
43.75					2	2	7	4	10	1	3	2	1					35
42.75					4	5	4	5	8	7	1					1		15
41.75			4		1	1	4	3		1	1							15
40.75				3	1	2	4	1	2	1		1						13
39.75			1			4	3	1	2		1	1						7
38.75	1		1	1	1	1		1		1								5
37.75			2	1														
TOTALS	2	0	9	7	9	19	34	34	44	36	27	24	14	13	9	5	1	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- WAIST BACK	44.96	3.20	$.68^*X +$	2.45	.645
X- WAIST FRONT	41.05	3.03	$.61^*Y +$	2.32	

TABLE 44

A BIVARIATE FREQUENCY TABLE FOR
GLUTEAL FURROW HEIGHT AND TIBIALE HEIGHT

GLUTEAL FURROW HEIGHT

	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	TOT
55.75																2
54.75												3				3
53.75										1	1					2
52.75									1	2	7	4	2			16
51.75							1		7	5	2	6				21
50.75								6	10	8	2	2				28
49.75							3	14	8	5	1					31
48.75						4	8	14	10	3						39
47.75					3	8	12	14	3	1						41
46.75				1	4	14	15	8	2							44
45.75				2	6	7	8	1	1							25
44.75				1	5	3	1									11
43.75				4	1	1										6
42.75				1	1	1	2									7
41.75				3	1	1										4
40.75	1			1												3
TOTALS	1	1	4	13	20	39	48	58	42	25	13	15	3	0	1	283
	NUMBER EXCLUDED															4
	TOTAL															287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- TIBIALE HEIGHT	47.64	6.30	.56*X +	2.633	5.78
X- GLUTEAL FURROW HEIGHT	80.37	4.42	.28*Y +	67.032	4.06
					.396

TABLE 45

A BIVARIATE FREQUENCY TABLE FOR
HEAD CIRCUMFERENCE AND HEAD LENGTH

HEAD CIRCUMFERENCE

	51	52	53	54	55	56	57	58	59	60	TOT
21.45											1
21.25											2
21.05											2
20.85											5
20.65											7
20.45											18
20.25											13
20.05											17
19.85											24
19.65											29
19.45											46
19.25											41
19.05											27
18.85											17
18.65											14
18.45											5
18.25											7
18.05											6
17.85											3
17.65											1
17.45											1
17.25											0
17.05											0
16.85											1
TOTALS	1	4	6	1	5	9	14	22	23	43	267

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- HEAD LENGTH	19.47	.70	.35*X -	.40	.819
X- HEAD CIRCUMFERENCE	56.01	1.63	1.90*Y +	.93	

TABLE 46
A BIVARIATE FREQUENCY TABLE FOR
HEAD CIRCUMFERENCE AND HEAD BREADTH

		HEAD CIRCUMFERENCE																TOT
		51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	ALS
16.75	.50	1																1
16.55	.50																	3
16.35	.50																	2
16.15	.50																	3
15.95	.50																	7
15.75	.50																	20
15.55	.50																	34
15.35	.50																	24
15.15	.50																	53
14.95	.50																	39
14.75	.50																	39
14.55	.50																	25
14.35	.50																	15
14.15	.50																	16
13.95	.50																	4
13.75	.50																	2
TOTALS		1	4	6	5	9	14	22	23	43	33	35	32	22	13	11	9	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- HEAD BREADTH	15.06	.54	$.20 \cdot X + .43$.43	.599
X- HEAD CIRCUMFERENCE	56.01	1.63	$1.82 \cdot Y + 28.606$	1.30	

A BIVARIATE FREQUENCY TABLE FOR HEAD LENGTH AND HEAD BREADTH

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y-	15.06	.54	.13X +	12.525	.53
X-	19.47	.70	.22Y +	16.156	.69

TABLE 48

A BIVARIATE FREQUENCY TABLE FOR
CHEST CIRCUMFERENCE AND WAIST CIRCUMFERENCE/NATURAL

CHEST CIRCUMFERENCE

	78	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	TOT
107.75																		1
105.75																	1	1
103.75														1			1	2
101.75																	1	1
99.75												1				1		2
97.75													1					1
95.75														1				5
93.75												1	1	3	1		1	9
91.75													2	1	1	2		8
89.75																		6
87.75																		6
85.75																		19
83.75																1		13
81.75																		13
79.75																		24
77.75																		21
75.75																		51
73.75																		43
71.75																		27
69.75																		16
67.75																		13
65.75																		4
63.75																		1
TOTALS	2	4	5	28	27	41	39	25	29	22	18	13	14	6	7	3	4	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y-WAIST CIRCUMFERENCE/NATURAL	78.68	8.04	$1.04^*X -$	4.22	.651
X- CHEST CIRCUMFERENCE	92.90	6.60	$.70^*Y +$	3.46	

TABLE 49

A BIVARIATE FREQUENCY TABLE FOR
HAND LENGTH AND PALM LENGTH

HAND LENGTH

	16	16	17	17	18	18	19	19	20	20	21	21	TOT
	.0	.50	.0	.50	.0	.50	.0	.50	.0	.50	.0	.50	ALS
12.05	1											2	5
11.85												1	11
11.65												2	9
11.45												1	13
11.25												1	26
11.05												1	47
10.85												1	37
10.65												1	35
10.45												1	32
10.25												1	26
10.05												1	18
9.85												1	16
9.65												1	5
9.45												1	2
9.25												1	1
9.05												1	2
TOTALS	1	3	5	21	45	39	51	59	32	23	6	2	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- PALM LENGTH	10.75	.58	$.53X +$.26	.894
X- HAND LENGTH	19.00	.99	$1.52Y +$.44	

TABLE 50
A BIVARIATE FREQUENCY TABLE FOR
HAND LENGTH AND HAND CIRCUMFERENCE

	HAND LENGTH												
	16	16	17	17	18	18	19	19	20	20	21	21	TOT
24.00	1	0	0	0	0	0	0	0	0	0	0	0	2
23.50													2
23.00													13
22.50													14
22.00													44
21.50													50
21.00													57
20.50													43
20.00													39
19.50													17
19.00													3
18.50													2
18.00													1
TOTALS	1	3	5	5	21	45	39	51	59	32	23	6	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- HAND CIRCUMFERENCE	21.11	1.00	$.59^*X +$.81	.585
X- HAND LENGTH	19.00	.99	$.58^*Y +$	6.756	.80

TABLE 51

A BIVARIATE FREQUENCY TABLE FOR
HAND LENGTH AND HAND BREADTH

HAND LENGTH

	16	16	17	17	18	18	19	19	20	20	21	21	TOT
	.0	.50	.0	.50	.0	.50	.0	.50	.0	.50	.0	.50	ALS
10.00									1				1
9.90									1				1
9.80								3	2	2			7
9.70							1		2	2	1	1	7
9.60									1	3	1	1	7
9.50							1	3	4	4	1		13
9.40						3	3	2	1	2			11
9.30						3	4	4	5		2		19
9.20					1	2	3	2	5	2	1		19
9.10				2	6	2	6	7	2	2			26
9.00			1	1	4	2	10	2	2	2			23
8.90			1	1	2	4	5	14	2	1			29
8.80			1	1	2	3	4	7		1			10
8.70			2	0	2	4	4	6		1			25
8.60		1		2	0	0	4	3	2	1			27
8.50				2	1	1	6	2	1				16
8.40			1	2	6	1		1					11
8.30		1	1	1	4	1	1	2					11
8.20				1	5	2	1		1				10
8.10					1								1
8.00		1											1
7.90	1		1										2
7.80				1	1								2
TOTALS	1	3	5	21	45	39	51	59	32	23	6	2	287

SUMMARY STATISTICS

	MEAN	STD DEV	REGRESSION EQUATIONS	SE-EST	R
Y- HAND BREADTH	8.92	.43	.26*X +	.34	.594
X- HAND LENGTH	19.00	.59	1.37*Y +	6.776	.79

INDEX BY NAME, ANATOMICAL LOCATION, AND MEASUREMENT TECHNIQUE

ACROMION/SEE SHOULDER		BACK CURVATURE-HIP	46C
ACROMION-RADIALE LENGTH	9T	BACK CURVATURE-WAIST	45C
ANKLES		BENT KNEE HEIGHT, SUPINE	13H
ANKLE CIRCUMFERENCE	40C	BENT TORSO	
HEEL-ANKLE CIRCUMFERENCE	63C	BENT TORSO BREADTH	10H
SPHYRION HEIGHT	69C	BENT TORSO HEIGHT	9H
ANKLE CIRCUMFERENCE	40C	BIACROMIAL BREADTH	16T
ARCS		BICEPS/SEE UPPER ARM	
BACK CURVATURE-CHEST	44C	BITRAGION BREADTH	14H
BACK CURVATURE-HIP	46C	BITRAGION-CORONAL ARC	2H
BACK CURVATURE-WAIST	45C	BITRAGION-FRONTAL ARC	3H
BITRAGION-CORONAL ARC	2H	BITRAGION-MENTON ARC	4H
BITRAGION-FRONTAL ARC	3H	BITRAGION-SUBMANDIBULAR ARC	5H
BITRAGION-MENTON ARC	4H	SAGITTAL ARC	1H
BITRAGION-SUBMANDIBULAR ARC	5H		
ARMS		BITRAGION-SUBMANDIBULAR ARC	5H
ACROMION-RADIALE LENGTH	9T	BREADTHS	
BICEPS CIRCUMFERENCE/FLEXED	33C	BENT TORSO BREADTH	10H
BICEPS CIRCUMFERENCE/RELAXED	23T	BIACROMIAL BREADTH	16T
ELBOW-FINGERTIP LENGTH	14C	BIOCULAR BREADTH	27H
ELBOW-GRIP LENGTH	11T	BITRAGION BREADTH	14H
ELBOW (RADIALE) HEIGHT	4T	FACE BREADTH (BIZYGOMATIC)	26H
FUNCTIONAL REACH	2H	FOOT BREADTH	64C
FUNCTIONAL REACH EXTENDED	3H	HAND BREADTH	58C
OVERHEAD REACH HEIGHT	1H	HEAD BREADTH	55C
OVERHEAD REACH, SITTING	4H	MINIMUM FRONTAL BREADTH	25H
RADIALE-STYLION LENGTH	10T	NOSE BREADTH	30H
SHOULDER CIRCUMFERENCE	25C	OVERHEAD REACH BREADTH	8H
SHOULDER-ELBOW LENGTH	13C		
SLEEVE INSEAM LENGTH	51C	BUTTOCK/HIPS	
SLEEVE OUTSEAM LENGTH	52C	BACK CURVATURE-HIP	46C
AXILLA		BUTTOCK HEIGHT	8C
AXILLA HEIGHT	4C	BUTTOCK-KNEE LENGTH	17C
SLEEVE INSEAM LENGTH	51C	FUNCTIONAL LEG LENGTH	5H
SLEEVE OUTSEAM LENGTH	52C	HIP CIRCUMFERENCE	30C
BACK CURVATURE-CHEST	44C		

INDEX BY NAME, ANATOMICAL LOCATION, AND MEASUREMENT TECHNIQUE

BUTTOCK HEIGHT	8C	DEPTHS	
BUTTOCK-KNEE LENGTH	17C	CHEST DEPTH	18C
		WAIST DEPTH	19C
CALF CIRCUMFERENCE	39C	EARS	
CERVICAL		BITRAGION-CORONAL ARC	2H
WAIST BACK LENGTH	47C	BITRAGION-FRONTAL ARC	3H
		BITRAGION-MENTON ARC	4H
CHEST		BITRAGION-SUBMANDIBULAR ARC	5H
BACK CURVATURE-CHEST	44C	HEAD HGT (TRAGION-VERTEX)	15H
CHEST CIRCUMFERENCE	27C	TRAGION TO WALL	15H
CHEST DEPTH	18C	ECTOCANTHUS TO VERTEX	16H
CHEST HEIGHT	5C	ECTOCANTHUS TO WALL	12H
SUBSTERNAL HEIGHT	3T		
SUPRSTERNAL HEIGHT	2T	ELBOW-GRIP LENGTH	11T
CHEST CIRCUMFERENCE	27C	ELBOWS	
CHEST DEPTH	18C	ACROMION-RADIAL LENGTH	9T
CHEST HEIGHT	5C	ELBOW-GRIP LENGTH	11T
CHIN/SEE MENTON		ELBOW-FINGERTIP LENGTH	14C
		ELBOW (RADIAL) HEIGHT	4T
		RADIAL-STYLION LENGTH	10T
		SHOULDER-ELBOW LENGTH	13C
CIRCUMFERENCES		EYES	
ANKLE CIRCUMFERENCE	40C	BIOCULAR BREADTH	27H
BICEPS CIRCUMFERENCE/FLEXED	33C	ECTOCANTHUS TO VERTEX	16H
BICEPS CIRCUMFERENCE/RELAXED	23T	ECTOCANTHUS TO WALL	12H
CHEST CIRCUMFERENCE	27C	EYE HEIGHT, SITTING	12C
CALF CIRCUMFERENCE	39C	INTERPUPILLARY DISTANCE	28H
FOOT CIRCUMFERENCE	66C		
HAND CIRCUMFERENCE	59C	FACE BREADTH (BIZYGOMATIC)	26H
HEAD CIRCUMFERENCE	54C	FACE LGTH (SELLION-MENTON)	23H
HEEL-ANKLE CIRCUMFERENCE	63C		
HIP CIRCUMFERENCE	30C	FEET	
SHOULDER CIRCUMFERENCE	25C	FOOT CIRCUMFERENCE	66C
WAIST CIRCUMFERENCE	29C	FOOT LENGTH	62C
WAIST CIRCUMFERENCE/OMPHALION	19T	FUNCTIONAL LEG LENGTH	5H
CRINION-MENTON	24H	HEEL-ANKLE CIRCUMFERENCE	63C
		INSTEP LENGTH	61C
DELTOID MUSCLES		SPHYRION HEIGHT	69C
SHOULDER CIRCUMFERENCE	25C		

INDEX BY NAME, ANATOMICAL LOCATION, AND MEASUREMENT TECHNIQUE

FINGERTIP		HEAD AND FACE	
ELBOW-FINGERTIP LENGTH	14C	BIOCULAR BREADTH	27H
		BITRAGION BREADTH	14H
FOOT CIRCUMFERENCE	56C	BITRAGION-CORONAL ARC	2H
		BITRAGION-FRONTAL ARC	3H
FOOT LENGTH	62C	BITRAGION-MENTON ARC	4H
		BITRAGION-SUBMANDIBULAR ARC	5H
FUNCTIONAL LEG LENGTH	5W	CRINION-MENTON	24H
		ECTOCANTHUS TO VERTEX	16H
FUNCTIONAL REACH	2W	ECTOCANTHUS TO WALL	12H
		FACE BREADTH (BIZYGOMATIC)	26H
FUNCTIONAL REACH EXTENDED	3W	FACE LGTH (SELLION-MENTON)	23H
		GLABELLA TO VERTEX	17H
GLABELLA TO VERTEX	17H	GLABELLA TO WALL	6H
		HEAD BREADTH	55C
GLABELLA TO WALL	6H	HEAD CIRCUMFERENCE	54C
		HEAD HGHT (TRAGION-VERTEX)	15H
GLABELLA		HEAD LENGTH	56C
BITRAGION-FRONTAL ARC	3H	INTERPUILLARY DISTANCE	28H
GLABELLA TO VERTEX	17H	LIP PROTRUSION TO WALL	10H
GLABELLA TO WALL	6H	MENTON TO VERTEX	22H
		MENTON TO WALL	11H
GLUTEAL FURROW HEIGHT	7T	MINIMUM FRONTAL BREADTH	25H
		MOUTH BREADTH, SMILING	31H
GRIP		NOSE BREADTH	30H
ELBOW-GRIP LENGTH	11T	NOSE LENGTH	29H
		PRONASALE TO VERTEX	19H
HAND BREADTH	58C	PRONASALE TO WALL	8H
		SAGITTAL ARC	1H
HAND CIRCUMFERENCE	59C	SELLION TO VERTEX	18H
		SELLION TO WALL	7H
HANDS		STOMION TO VERTEX	21H
HAND BREADTH	58C	SUBNASALE TO VERTEX	20H
HAND CIRCUMFERENCE	59C	SUBNASALE TO WALL	9H
HAND LENGTH	60C	TRAGION TO WALL	13H
KNUCKLE HEIGHT	5T		
PALM LENGTH	57C	HEEL-ANKLE CIRCUMFERENCE	63C
WRIST CIRCUMFERENCE	36C		
		HEELS	
HEAD BREADTH	55C	FOOT LENGTH	62C
		FUNCTIONAL LEG LENGTH	5W
HEAD CIRCUMFERENCE	54C	HEEL-ANKLE CIRCUMFERENCE	63C
		INSTEP LENGTH	61C
HEAD LENGTH	56C		

INDEX BY NAME, ANATOMICAL LOCATION, AND MEASUREMENT TECHNIQUE

HEIGHTS		KNEELING HEIGHT	11W
AXILLA HEIGHT	4C	KNEELING LEG LENGTH	12W
BENT TORSO HEIGHT	9W	POPLITEAL HEIGHT	16C
CHEST HEIGHT	5C		
BUTTOCK HEIGHT	8C	KNUCKLE HEIGHT	5T
ELBOW (RADIALE) HEIGHT	4T		
EYE HEIGHT, SITTING	12C	LEGS	
GLUTEAL FURROW HEIGHT	7T	ANKLE CIRCUMFERENCE	40C
KNEE HEIGHT, SITTING	15C	BENT KNEE HEIGHT, SUPINE	13W
KNEELING HEIGHT	11W	BUTTOCK-KNEE LENGTH	17C
KNUCKLE HEIGHT	5T	CALF CIRCUMFERENCE	39C
OVERHEAD REACH HEIGHT	1W	FUNCTIONAL LEG LENGTH	5W
POPLITEAL HEIGHT	16C	HEEL-ANKLE CIRCUMFERENCE	63C
SITTING HEIGHT	11C	HORIZONTAL LGTH, KNEELING	14W
SPHYRION HEIGHT	69C	KNEE HEIGHT, SITTING	15C
STATURE	2C	KNEELING LEG LENGTH	12W
STATURE (CLOTHED)	7W	POPLITEAL HEIGHT	16C
SUBSTERNAL HEIGHT	3T	TIBIALE HEIGHT	8T
SUPRASTERNAL HEIGHT	2T		
TIBIALE HEIGHT	8T	LENGTHS	
WAIST HEIGHT	6C	ACROMION-RADIALE LENGTH	9T
		BUTTOCK-KNEE LENGTH	17C
HIP CIRCUMFERENCE	30C	ELBOW-FINGERTIP LENGTH	14C
		ELBOW-GRIP LENGTH	11T
HORIZONTAL LGTH, KNEELING	14W	FOOT LENGTH	62C
		FUNCTIONAL LEG LENGTH	5W
INSTEP LENGTH	61C	HAND LENGTH	60C
		HEAD LENGTH	56C
INTERPUILLARY DISTANCE	28H	HORIZONTAL LGTH, KNEELING	14W
		INSTEP LENGTH	61C
INTERSCYE, BACK	42C	INTERSCYE, BACK	42C
		INTERSCYE, FRONT	43C
INTERSCYE, FRONT	43C	KNEELING LEG LENGTH	12W
		PALM LENGTH	57C
KNEE HEIGHT, SITTING	15C	RADIALE-STYLION LENGTH	10T
		SHOULDER-ELBOW LENGTH	13C
KNEELING HEIGHT	11W	SLEEVE INSEAM LENGTH	51C
		SLEEVE OUTSEAM LENGTH	52C
KNEELING LEG LENGTH	12W	WAIST BACK LENGTH	47C
		WAIST FRONT LENGTH	48C
KNEES			
BENT KNEE HEIGHT, SUPINE	13W	LIPS	
BUTTOCK-KNEE LENGTH	17C	LIP PROTRUSION TO WALL	10H
HORIZONTAL LGTH, KNEELING	14W	MOUTH BREADTH, SMILING	31H
KNEE HEIGHT, SITTING	15C	STOMION TO VERTEX	21H

INDEX BY NAME, ANATOMICAL LOCATION, AND MEASUREMENT TECHNIQUE

MANDIBLE		PRONASALE TO WALL	8H
BITRAGION-SUBMANDIBULAR ARC	5H	RADIALE-STYLION LENGTH	10T
MENTON TO VERTEX	22H	RADIALE	
MENTON TO WALL	11H	ACROMION-RADIALE LENGTH	9T
MENTON		ELBOW (RADIALE) HEIGHT	4T
BITRAGION-MENTON ARC	4H	RADIALE-STYLION LENGTH	10T
CRINION-MENTON	24H	REACHES	
FACE LGTH (SELLION-MENTON)	23H	FUNCTIONAL REACH	2W
MENTON TO VERTEX	22H	FUNCTIONAL REACH EXTENDED	3W
MENTON TO WALL	11H	OVERHEAD REACH HEIGHT	1W
MINIMUM FRONTAL BREADTH	25H	OVERHEAD REACH, SITTING	4W
MOUTH BREADTH, SMILING	31H	SAGITTAL ARC	1H
MOUTH		SELLION TO VERTEX	18H
LIP PROTRUSION TO WALL	10H	SELLION TO WALL	7H
MOUTH BREADTH, SMILING	31H	SELLION	
STOMION TO VERTEX	21H	FACE LGTH (SELLION-MENTON)	23H
NASAL ROOT/SEE SELLION		NOSE LENGTH	29H
NOSE BREADTH	30H	SELLION TO VERTEX	18H
NOSE LENGTH	29H	SELLION TO WALL	7H
NOSE		SHOULDER-ELBOW LENGTH	13C
NOSE BREADTH	30H	SHOULDER	
NOSE LENGTH	29H	ACROMION-RADIALE LENGTH	9T
PRONASALE TO VERTEX	19H	BIACROMIAL BREADTH	16T
PRONASALE TO WALL	8H	BENT TORSO BREADTH	10W
SUBNASALE TO VERTEX	20H	OVERHEAD REACH BREADTH	8W
SUBNASALE TO WALL	9H	SHOULDER CIRCUMFERENCE	25C
OVERHEAD REACH BREADTH	8W	SHOULDER-ELBOW LENGTH	13C
OVERHEAD REACH, SITTING	4W	SLEEVE INSEAM LENGTH	51C
PALM LENGTH	57C	SITTING HEIGHT	11C
POPLITEAL HEIGHT	16C	SITTING HEIGHTS	
PRONASALE TO VERTEX	19H	EYE HEIGHT, SITTING	12C
		KNEE HEIGHT, SITTING	15C
		POPLITEAL HEIGHT	16C
		SITTING HEIGHT	11C

INDEX BY NAME, ANATOMICAL LOCATION, AND MEASUREMENT TECHNIQUE

SKINFOLDS		TORSO BACK	
BICEPS SKINFOLD	27T	BACK CURVATURE-CHEST	44C
SUBSCAPULAR SKINFOLD	25T	BACK CURVATURE-HIP	46C
SUPRAILIAC SKINFOLD	28T	BACK CURVATURE-WAIST	45C
TRICEPS SKINFOLD	26T	INTERSCYE, BACK	42C
		SUBSCAPULAR SKINFOLD	25T
SLEEVE INSEAM LENGTH	51C	WAIST BACK LENGTH	47C
		TORSO FRONT	
SLEEVE OUTSEAM LENGTH	52C	INTERSCYE, FRONT	43C
SPHYRION HEIGHT	69C	WAIST FRONT LENGTH	48C
STATURE	2C	TRAGION	
STATURE (CLOTHED)	7W	BITRAGION BREADTH	14H
		BITRAGION-CORONAL ARC	2H
STOMION		BITRAGION-FRONTAL ARC	3H
LIP PROTRUSION TO WALL	10H	BITRAGION-MENTON ARC	4H
MOUTH BREADTH, SMILING	31H	BITRAGION-SUBMANDIBULAR ARC	5H
STOMION TO VERTEX	21H	HEAD HGHT (TRAGION-VERTEX)	15H
		TRAGION TO WALL	13H
STYLION		TRICEPS SKINFOLD	
HAND LENGTH	60C		26T
RADIALE-STYLION LENGTH	10T	UPPER ARM	
		BICEPS CIRCUMFERENCE/FLEXED	53C
SUBNASALE TO VERTEX	20H	BICEPS CIRCUMFERENCE/RELAXED	23T
		BICEPS SKINFOLD	27T
SUBNASALE TO WALL	9H	TRICEPS SKINFOLD	26T
SUBNASALE		VERTEX	
NOSE LENGTH	29H	BITRAGION-CORONAL ARC	2H
SUBNASALE TO VERTEX	20H	ECTOCANTHUS TO VERTEX	16H
SUBNASALE TO WALL	9H	GLABELLA TO VERTEX	17H
		HEAD HGHT (TRAGION-VERTEX)	15H
SUBSCAPULAR SKINFOLD	25T	MENTON TO VERTEX	22H
		PRONASALE TO VERTEX	19H
SUBSTERNALE HEIGHT	3T	SELLION TO VERTEX	18H
		SITTING HEIGHT	11C
SUPRAILIAC SKINFOLD	28T	STATURE	2C
		STATURE (CLOTHED)	7W
SUPRASTERNALE		STOMION TO VERTEX	21H
SUPRASTERNALE HEIGHT	2T	SUBNASALE TO VERTEX	20H
WAIST FRONT LENGTH	48C		
TIBIALE HEIGHT	8T	WAIST BACK LENGTH	47C

INDEX BY NAME, ANATOMICAL LOCATION, AND MEASUREMENT TECHNIQUE

WAIST CIRCUMFERENCE 29C

WAIST CIRCUMFRCE/OMPHALION 19T

WAIST DEPTH 19C

WAIST FRONT LENGTH 48C

WAIST HEIGHT 6C

WAIST

BACK CURVATURE-WAIST 45C

WAIST BACK LENGTH 47C

WAIST CIRCUMFERENCE 29C

WAIST CIRCUMFRCE/OMPHALION 19T

WAIST DEPTH 19C

WAIST FRONT LENGTH 48C

WAIST HEIGHT 6C

WALL

ECTOCANTHUS TO WALL 12H

GLABELLA TO WALL 6H

LIP PROTRUSION TO WALL 10H

MENTON TO WALL 11H

PRONASALE TO WALL 8H

SELLION TO WALL 7H

SUBNASALE TO WALL 9H

TRAGION TO WALL 13H

WEIGHT 1C

WEIGHT (CLOTHED) 6W

WRIST

RADIALE-STYLION LENGTH 10T

ZYGOMATIC

BLTRAGION-SUBMANDIBULAR ARC 5H